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The Information seeking behaviours of Māori
secondary school students

A thesis presented in partial fulfilment of the
requirements for the degree of Doctor of Philosophy at
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Spencer Charles Lilley

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Abstract

Current knowledge of the information seeking behaviour of Māori secondary school students is extremely limited.

The objective of this study was to determine how Māori students access and use information to make sense of the two worlds they live in. The research results demonstrated that they have a distinct preference for seeking information from other people, rather than print and electronic sources. A key part of the information behaviour involved exchanging and sharing information within and between social networks. Fisher's information grounds theory was used to investigate and interpret the information networking behaviour.

The study was conducted using a mixed methodology and determined that the students participated in social networks in three different zones, at school, in social and virtual settings, and cultural situations. Each of these zones has sub-areas where information sharing and exchange transactions take place. At school the sub-areas are in formal and casual situations, and in the hostel zone. The social zones include shopping malls, foodcourts, 'downtown' destinations, cafes, parties, church and virtual environments. The cultural zones were identified as marae and whānau dwellings.

The research results revealed that Māori students encounter a wide range of barriers in the process of seeking information, including not always being able to access the information they want due to its 'unavailability', or their perception that the information is incorrect. Access to information technology and the internet remain significant barriers for students to overcome. The study revealed that the types of

barriers encountered by students varied according to the cultural context they were seeking the information in. It was found that individuals that have strong sense of their Māori cultural identity have an inner confidence that leads to them experiencing fewer information barriers when seeking information in the two cultural worlds they are part of.

The study concludes by presenting a model that is created from the research data and is based on three tikanga Māori principles: the principle of kaupapa whakakaha (strength), the principle of kaupapa tuakiri (identity) and the principle of kaupapa atawhai (humanity). The principle of kaupapa whakakaha includes the values of rangatiratanga (self-determination), whakamana (status), pono (trust), wairuatanga (spirituality) and whakamowai (humility). The principle of kaupapa tuakiri includes the values of whakapapa (legitimacy), iwitanga (tribal pride), te reo (language), whanaungātanga (relationships) and kotahitanga (unity). The principle of kaupapa atawhai includes tau-utuutu (reciprocity), awhina (assistance), rehia (enjoyment) and tautoko (support).

This model demonstrates that indigenous (in this case Māori) values are important factors in the successful sharing and exchange of information between Māori secondary school students. The result of this research is the discovery that Māori students who form social networks use these values as a basis for identifying the desired behaviours within their group and when interacting with other groups. Although there are fifteen values, it is not necessary for all of them to be present every time, as the gathering point and those who are there will determine which are relevant to that particular situation. The presence of the selected values within a group will determine whether it is a 'safe' environment for those present to exchange and share information,

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Whaia e koe ki te iti kahurangi; ki te tuohu koe, me maunga teitei

Seek the treasure you value most dearly: if you bow your head, let it be to a lofty mountain.

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Prologue

When I commenced the research for this Doctoral thesis I was strongly motivated to investigate what information sources were used by Māori secondary school students to make sense of the two cultural worlds they are part of. This was based on the notion that, as Māori, they were participants in a cultural context that is organised in a structured manner revolving around formal and informal ceremonial actions and a value system firmly entrenched in tikanga Māori (Māori cultural customs)¹.

However, these students are also members of everyday society in New Zealand. As active participants in this wider culture they are expected to conform to the legal, social and cultural norms that have been developed by the society at large. In keeping with these norms, they are expected to progress through the education system and or participate in the workforce so they can contribute to the social and economic future of New Zealand society. In balancing these expectations, they are in the position of having to make sense of their lives within the boundaries of two different worldviews, one of which is distinctly Māori and the other which is best described as mainstream² (and centred on Western values). Although at various stages these two worlds overlap, at other times they will remain separate. Consistent with these different worldviews is the need to develop an understanding of the cultural, social and knowledge traditions that exist within each of these environments. A failure to develop this understanding could affect an individual's effectiveness as a participant in either or both of these worlds.

¹ Each Māori word or phrase will be defined the first time it is used in each chapter and will be included in the Glossary on page 318

² The term mainstream is normally viewed with some caution by Māori and other indigenous peoples as it implies that Western culture is normal and Māori/indigenous culture is not. The term is used in this context as a matter of convenience in order to indicate that there is an alternate worldview to that of Māori

Part of the motivation for undertaking this project can be traced back to my own experiences as a senior secondary school student in the early 1980s who was deciding what to do with his life after finishing school. Like many others before me in my whānau (extended family) I could have chosen to get a job, save money, buy a house and settle down in New Plymouth (my home city). However, wanting to escape the inevitable job in the banking industry or the previously offered Government Department cadetship, I decided that my future lay in undertaking further study at a university level.

My own family did not have much experience of tertiary education, although my older brother had studied at the local polytechnic and was in his first year at Victoria University. However, our interests and abilities were radically different. As a consequence I had a somewhat naïve view of what was possible at university. This was in no way assisted by the fact that in my whānau (including grandparents, aunts, uncles and cousins) only one cousin was in the process of gaining a tertiary qualification, a Diploma of Teaching. The experiences of my brother and cousin were valuable in proving that there was opportunity beyond secondary education, but what it didn't help with was identifying the different pathways available to study. Like many others I sought the material produced by the institution I chose to enrol at, however I was not prepared for the inaccessibility of the academic language contained within these materials. As my family resources were relatively restricted and none of my friends or acquaintances was planning to go to the University of Auckland, I sought the assistance of the school counsellor, whom I knew well enough to approach. His advice assisted me to put together a programme of study for my first year of the Bachelor of Arts at the University of Auckland. Unfortunately two of the subjects that he had recommended were the only two subjects I failed in the next six years of university education. Alas, I was not destined to be a sociologist or psychologist. After a moderately successful first year, having failed two papers and withdrawn from another, I enrolled in my second year with greater confidence in my ability to identify papers and subjects more in

tune with my interests. This confidence was gained through a year of being exposed to an environment where information was shared by peers within my student hostel, lectures and tutorials. Older, more experienced students passed on advice about how to identify papers and lecturers that they considered were good value.

At the same time I was going through a journey of cultural self-discovery. Growing up as part of a large Māori whānau (my mother was one of fifteen siblings), life was quite ordinary. Every weekend we gathered at my grandmother's house, we would have a communal meal, my parents, aunts, uncles and older cousins would play cards and the rest of us (the cousins) would terrorise the neighbourhood. We did not have a marae and although my mother and her older siblings had been fluent speakers of te reo Māori (Māori language) in their youth, they only spoke it to my nana when trying to explain concepts not easily explained in English. Only occasionally would tikanga Māori be used (mostly karakia (prayers)), however, when we had a death in the whānau, the rituals associated with tangihanga (funerals) would take over, and the subsequent outpouring of grief would be underpinned with values such as whanaungātanga (relationship building), manaakitanga (hospitality) and arohatanga (care and respect).

To state that my cousins and I lurched from one Māori situation to another in a state of confusion is perhaps putting it too mildly. Although our nana had pictures of various family members on her wall, we were not aware of our whakapapa (genealogy), let alone the names of our aunts, uncles and cousins who had passed away. As we got older natural curiosity took over and we asked questions of our whānau and in my case, being decidedly bookish, looking for information in the resources on Taranaki. Although these resources gave me an understanding of some of the historical background about the obliteration of our principal hapu (sub-tribe) by invaders from the Waikato, there was very little information available for the period after this. Our situation was not helped by the fact that my mother's eldest brother had the

whakapapa books and was estranged from the rest of the whānau. To further complicate matters, my grandfather had died at an early age and my nana was illiterate so she had not been able to record anything herself. She also had limited contact with her husband's whānau other than at tangihanga or during the occasional fleeting visit.

Like many of the students involved in this research project, I asked my parents unsuccessfully for information about the whānau and our whakapapa. My mother was able to fill some gaps from her limited knowledge and we were taken to sites of historical significance to our whānau, such as battle sites, traditional food gathering places, our urupā (cemetery) and land blocks (owned or previously owned). Rather than satisfying my curiosity, it simply added to the conundrum of who we were and how we belonged. In hindsight I realise that I had not reached a point where I could make sense of my place in the Māori world. This lack of sense can be attributed to an incomplete set of facts about the genealogy of our whānau whakapapa (kinship-based whānau).

It was not until I was a young student at the University of Auckland that I began to get a stronger awareness of the greater cultural and political significance of being Māori. This, like the "knowledge of university ways", was learned through my interactions with others, in this case Māori students and lecturing staff who educated me in the ways of the Māori world and challenged my naïve outlook on life. This was largely occurring out of class, particularly when I was engaged in social activities with other Māori students. Upon reflection I can see now that I was participating in and learning from my friends, peers and lecturers and using my social networks to obtain information.

In 2005 I found history repeating itself. My niece, who at that stage was in Year 12 at her secondary school, was trying to decide what career pathways were open to her in the future. One of her problems was that she was unsure what subjects she should be undertaking in her last year at secondary school and how this would affect her when deciding on

courses of interest at university level. Neither of her parents had attended university, nor her older siblings, so my older brother and I were the two closest members of the whānau that had been successfully educated in the university system. She had tried other individuals and avenues of information before approaching me and was confused, mainly due to the conflicting advice she had received regarding careers that she should be interested in and the subjects she needed to continue studying if she wanted to pursue these at the tertiary level. I was determined to see that my niece did not make the same mistakes that I had in my first year at university, so I agreed to assist her by identifying sources of information that would provide a wider perspective on the types of careers available and the subjects she needed to study at secondary school level to be able to compete for entry into the appropriate programmes at university level.

What struck me as most peculiar was that, despite the 24 year gap between me leaving secondary school and my niece seeking my advice, nothing much had changed, as the systems in place at schools didn't appear to be any better than in my own day. Although my niece could ask my advice and consult the information sources I suggested in the process of deciding what to do, it became obvious to me that many Māori students were still in the same position I had found myself in back in 1981.

As the Kaihautū Māori (Māori Services Manager) in the Massey University Library system I am very aware of the information issues and challenges encountered by Māori students at all levels of university study, but even more so by those that are trying to make sense of the options available to them in their early years of study. The language that we speak in a university is full of jargon and acronyms, and is at times quite bewildering. For those who have no prior connection with the university or its staff, it is easy to become confused and feel like you are an 'outsider' or an impostor.

The effect of this confusion on students has become more obvious to me as a result of my experiences on a board that oversees the distribution of bursaries to students wishing to study in a programme that will lead to a career in Māori mental health, and as the chair of a scholarship committee that provides awards to Māori students enrolled at postgraduate level. A vital criterion in the award of these scholarships is academic success. A substantial number of students applying for these awards have low grade point averages due to academic failures and DNC (Did Not Complete) grades on their academic records. Although there are many reasons for students receiving these grades, anecdotal evidence obtained from students, student learning advisors and academic staff members is that part of this failure can be attributed to receiving poor or no course advice before enrolling in programmes and / or papers. This is partly due to their reluctance to ask for help in choosing papers or to seek assistance from learning support or lecturing staff when they struggle with the course content.

As a librarian with more than twenty years of professional experience and a strong advocate of information literacy I was aware that these skills are sadly lacking amongst Māori students at all levels of university study. Despite the best efforts of the library it is difficult to get Māori students to engage with training opportunities designed to allow them to develop these skills. I was also conscious of the low in-person use of the library and the services and resources it offers by Māori students. Where these students obtain the information that assists them to fulfil their academic potential is something of a mystery. In undertaking this research I was hugely motivated to solve that mystery. In doing so, I hoped that by bearing in mind my personal failings as 'a confused student' in the 1980s and my professional experience and knowledge as a librarian that I could present clearer pathways to those who are still navigating their way through the maze of information they encounter when making decisions that impact on the future of them and their whānau.

Introduction

Ko te manu kai i te miro nona te ngahere.

Ko te manu kai i te mātauranga nona te ao.

The bird who eats from the miro tree owns the forest.

The bird who eats of the tree of knowledge owns the world.

To address the personal and professional issues that I outlined in the prologue, the purpose of this research project was to understand the information seeking attitudes of Māori students before they reached tertiary study, as I recognised that these habits and attitudes were well formed before they reached this level. This research was therefore aimed at gaining an understanding of how students aged between sixteen and eighteen interacted and used information to make sense of the world they live in, and whether the process of seeking this information was the same or varied when the search was being undertaken in the different cultural worlds that they are part of.

The key research question therefore is, how do Māori students make sense of the world they live in? Other questions that this thesis provides answers to include, what are the principal sources that Māori students consult when they are seeking information? Do these sources vary according to the cultural context they are searching in? Does strength / weakness of Māori identity play a factor in information seeking behaviours? What information barriers exist for Māori students and do these vary according to the cultural context?

These questions were designed to lead to other discoveries regarding the value the participants place on information, the types of information

they exchange with those that they are networking with and the barriers they encounter in this process.

The research project used a mixed-method combination of a questionnaire and focus groups to gather data from Māori students in year Eleven, Twelve and Thirteen at four secondary schools in the North Island.

The importance of this study lies in the fact that it is the first known investigation of how Māori youth engage with information across a variety of contextual situations. The outcomes of this research will assist in a greater understanding of how Māori exchange, share and use information for the benefit of themselves, their whānau and the social networks with which they interact. It focused on the information exchanges that young Māori are involved in on a daily basis in their everyday world, including their participation in Māori cultural situations. As such, the inspiration for the thesis came not only from a Māori worldview, but also from the concepts and theories developed by North American theorists Elfreda Chatman, Karen E. Fisher and Mark Granovetter.

Structure of the thesis

The remainder of this chapter outlines the structure and content of the thesis. This introductory chapter has provided an overview of the purpose of the thesis, the key research questions, the importance of the research and its contribution to developing an understanding of the significance that information and information behaviour plays in the life of Māori secondary school students.

Chapter One focuses on describing how the information world that surrounds Māori has evolved, adapted and changed. Through the use of relevant literature, this change is placed within the context of Māori mythology and traditions that explore the role of cosmology and

astronomy, and oral accounts of creation, migration and colonisation that have had an impact on how this information world has been shaped.

Chapter Two builds on the previous chapter by assessing how the changes in the Māori information world over time are reflected in the 21st century information environment that the Māori secondary school students participating in this research project are part of. This provides an explanation of the importance of information in the contemporary era, and its impact on Māori youth.

Chapter Three reviews relevant literature on information seeking, particularly where it relates to the information behaviour of youth and school aged children, and explains how the information grounds theory is used to demonstrate the importance of inter-personal sharing and exchange of information in making sense of the world. Another important aspect of this chapter is its highlighting of the lack of existing literature relating to Māori information seeking behaviours and engagement with information seeking tools and institutions such as libraries.

Chapter Four details how the research was crafted and planned, and the methodological approaches used in the thesis. It explains the rationale for using a combination of a questionnaire and focus groups in a mixed-methodological approach to gathering the research data, and includes a description of the ethical challenges encountered in the application of the methodology. Each of the four schools involved in the study, how they were selected, and the participants and how they were chosen is described.

The next four chapters describe the information obtained from the research. Chapter Five considers the information exchange networks that Māori students participate in at school: how these networks are formed; the participants within them and those that are excluded; places within the school where these exchanges take place; the value of the

information exchanged to individual participants and to the social network overall. Chapter Six moves on to describing the role information networks play in social contexts, and includes a description of the locations in which these exchanges take place and the significance of technology. Chapter Seven focuses on the role of information in cultural settings, particularly marae. It describes the cultural issues encountered in the process of sharing and exchanging information, and the role that Māori identity and cultural competencies have on information seeking behaviour in this environment. Chapter Eight moves the focus to a discussion of the information barriers that Māori students encounter when seeking information, and how these barriers vary according to the context in which information is being sought in.

Chapter Nine draws on the analysis of the previous four chapters to present a model embedded in tikanga Māorithat focuses on the key principles and values that guide the operation of the social networks formed by Māori youth, and how these relate to information seeking behaviour.

Chapter Ten, the final chapter, brings together the themes identified in the discussion in Chapter Nine, and identifies the most significant aspects of the findings and the contribution that this study makes to our knowledge of information seeking behaviours of Māori secondary school students. In this chapter I have identified the research questions and their significance to the information seeking behaviours of Māori secondary school students. In order to have a conceptual understanding of the importance of information to Māori, the next chapter focuses on how the Māori information world has evolved, drawing on the evidence from mythology, cosmology, oral tradition and interaction with the changes brought through contact with Western influences.

Chapter One

Ki te wheiao, ki te ao marama From darkness, into the world of light

The previous chapter provided an introduction and outlined the purpose of the research project. The role of Chapter One is to put the Māori information world in context, by exploring how information was created and how it has evolved through exposure to external influences.

Like other pre-literate societies, Māori had proven techniques of accessing, recording and transmitting information that enabled them to interact with the environment and with each other. Like the changes that were required to live in the ever developing world around them, Māori adapted to the challenges that new knowledge and technologies presented and used these to their advantage. As such, the information world that Māori currently occupy is radically different to that of our tupuna (ancestors), although the content of what we call traditional Māori information is similar to what they accessed. This chapter traces how information was created, how it has evolved and been influenced through the introduction of new ideologies and technologies, and the impact that these and the policies associated with them has had on the Māori worldview.

Creation

The creation of the world is attributed to Io (supreme being) by some iwi (tribes). To them, he is the supreme being and as such was the ultimate tipuna (ancestor); as the supreme God he is acknowledged as the creator of the Universe through Te Kore (the void), the various stages of

Te Po (the darkness) and gradually into Te Ao Marama (the world of light).

In tracing the development of information and knowledge within a Māori worldview it is necessary to look back to the relationship between humans, Māori atua (gods) and the creation of the universe that is at the core of Māori belief systems. Shirres (1997:23) describes this as a “model of the universe made up of at least two worlds intimately linked, a world of spiritual powers and the material world we see around us”. It is in this context that the creation of the universe, Earth and humankind is linked and before this world was created there was nothing (the void). Gods, people, animals and plant life were only formed through the actions of Io.

Barlow (1991:173-74) describes the links between the elements identified by Shirres by placing them in the context of whakapapa (genealogy), identifying four layers that lead from the celestial realm to the human realm. These layers are identified as: the cosmic genealogy; genealogy of the gods; primal genealogy; and genealogy of the canoes.

Barlow describes the cosmic genealogy as being the domain of Io, who is acknowledged as the creator of the Universe and as Io-matua (the supreme parent). In turn Io created Te Kore, a space that was void of any form or substance. The potential for form and substance came with the development of the different realms of Te Pō (nights).

Marsden (2003:16-17) provides more specific detail about the different states of Te Pō including the transition from the very dark to almost light. He uses English translations when clarifying the distinctions between the states. Te Pō-nui (the great night), Te Pō-roa (the extensive night), Te Pō-uriuri (the enveloping night), Te pō-kerekere (the intensive light), Te

Pō-tiwhatiwha (the night streaked with light), Te Pō-haehaea (the night streaked with broad light), Te Pō-te-kitea (the night of unseeing), Te Pō-tangotango (the night of hesitant exploration), Te Pō-te-whāwhā (the night of groping), Te Pō-namunamu ki Te Wheiao (the night inclined towards day) and Te Pō-tahuri-atu (the night that borders day).

Barlow (1991:173) complements Marsden's explanation by describing the development of the genealogy of the gods as being represented by the transition from darkness (Te Pō) through to the world of light (Te Ao Mārama). This process ultimately led to the creation of the parents of the Māori atua, Ranginui (Sky Father) and Pāpatuanuku (Earth Mother). From this union came the gods of various natural phenomenon such as Tane Mahuta (god of forests), Tawhirimatea (god of the winds), Tangaroa (god of the ocean & fish), Rongomatane (god of cultivated crops & peace), Haumiatiketike (god of fernroots and berries), Tumatauenga (god of war) and Ruamoko (god of earthquakes). These gods continued the creation process through the development of humankind which was determined by Ranginui and Pāpatuanuku's children. Because of their desire to live in a world of light, they forced the separation of their conjoined parents and were able to establish themselves as mortal humans during this process. To cement the human lineage Tane wished to create a mate, and in his quest he demonstrated principles of information seeking behaviour including defining his problem, researching it, experimentation and finally by applying the information he had obtained to create the first woman, Hineahuone, from clay. After giving her the breath of life they bore a daughter together, Hinetitama. Tane then mated with Hinetitama and they had several children who were the forebears of all humans.

Barlow's fourth realm, that of the canoe genealogy, is equally important, because it explains the basis of descent for each of the iwi. This lineage refers to the ancestors that voyaged to Aotearoa from Hawaiki and their

descendants. Each voyaging waka (canoe) is associated with an ancestor, from whom each iwi traces their descent. For example, the kaihautu (navigator) of the Tainui waka was the chief known as Hoturoa. The Tainui federation consists of four principal iwi, Waikato, Hauraki, Raukawa and Ngāti Maniapoto all of whom trace their ancestry to Hoturoa.

In conclusion, the link between the Māori atua, the environment and all living things including humans is based on whakapapa. With the right information it is possible to connect genealogical lineages back to their celestial origins.

The origins of knowledge

In the Māori worldview, knowledge originates and was obtained from the highest heaven, the abode of the supreme being, Io. Through myths and legends it is explained that the super-hero Tane³, in his quest to obtain knowledge, overcame several barriers and climbed to the twelfth heaven. There he retrieved ngā kete o wananga (the three baskets of knowledge) and two sacred stones, Hukatai and Rehutai. He then descended to the seventh heaven, along with the baskets of knowledge, where his brothers had established the whare wananga (sacred house of learning). The teachings of the wananga are based on the knowledge obtained by Tane. According to Marsden (2003:60), the three baskets consisted of Te Kete Tūātea, Te Kete Tuauri and Te Kete Aronui. Smith (1913:93), however, labels them uruuru-matua, followed by uruuru-tipua and finally uruuru-tawhito. The content of these baskets were as follows:

Te Kete Tūātea (uruuru-matua), the basket of ritual knowledge, contained information in the celestial realm about how humans

³ In some iwi, this super-hero is known as Tane and others refer to Tāwhaki

were related to the Gods, as well as karakia (prayers) and rituals that were demonstrative of the goodness of Io.

Te Kete Tūāuri (uruuru-tipua), the basket of occult knowledge, contained what would be more commonly associated with the 'dark arts' or sorcery. This basket provided knowledge of acts and rituals designed to ward off evil spirits, illness and other despair.

Te Kete Aronui (uruuru-tawhito), the basket of secular knowledge, contained knowledge of the everyday tasks required for society to operate, including fishing, hunting, horticulture, carving, weaving, cooking, entertainment arts and astronomy.

The methods of instruction within the wananga are discussed by Smith (1913), Marsden and Henare (1992), Walker (1986) and King (1978), with each of them focused on the elite nature of access to information. Smith (1913:93), states that the syllabus for students entering the wananga was firstly uruuru-matua, followed by uruuru-tipua and finally uruuru-tawhito. Students were then able to choose which area they wished to take further study in, however all received instruction in each branch of the syllabus. Smith makes the point, however, that the witchcraft aspects of karakia contained in the second and third baskets were not taught in any of the wananga, but at night in secluded areas such as the depths of a forest, next to a stream or by a latrine, to avoid contact with other humans.

Unlike Smith, Marsden & Henare (1992:3) focus on how the wananga used worldview as an information source to assist their pupils to make sense of the world. They achieve this by placing the transition from knowledge to wisdom into a holistic context, contending that myths and legends, such as Tane's ascent to the heavens, were used as deliberate

constructs in traditional times to encapsulate the Māori view of the world. They also stated that worldviews “lie at the very heart of the culture, touching, acting, interacting with and strongly influencing every aspect of the culture”. Marsden and Henare linked this worldview to “the relationship between the creator, the universe and man”. Marsden and Henare’s use of worldview as a sensemaking agent for explaining the role of information in a Māori world is supported by Walker (1986) and King (1978), who both explore the role of tohunga (priests), values and status. Walker (1986:74) identifies tohunga as playing a pivotal role in protecting the sanctity and mana (prestige) of the knowledge being imparted. He describes their subsequent role in facilitating the transfer of it as being the “link between the celestial realm and the transmission of knowledge to humans from generation to generation”.

King (1978:12) builds on the use of cultural concepts such as mana, tapu (sacredness), and mauri (life force) as tools in the learning process and the transformation of knowledge. He describes the degree of mana and power possessed by an individual as proportionate to the range and depth of knowledge they have under their command. In this context, the sacredness of the information related mainly “to content especially where it consisted of ritualistic or genealogical information especially if it was related to lives and forces outside one’s own existence”. King also referred to the Māori belief “that knowledge had a life of its own, therefore contributing to the life-force [and where appropriate the well-being] of the person who absorbed it.”

Another view of how the instruction of youth was undertaken is provided by Best (1929:61-63) quoting Hori Ropiha of Ngati Kahungunu, who gave some details of how young people were trained to ensure that the pumanawa (talents) were developed. He explained that this involved teaching different skills involving rakau (wood). The first of these crafts was the handling of weapons and bird spears. The second covered

agricultural implements. The third set of skills focused on the construction of buildings. Specifically mentioned were whare wharau (temporary sheds), whare kauta (cooking structures) and pataka rahoraho (storage platforms), which included the covered storehouse. Next was learning how to build protective fences for the gardens and for the village, followed by building domestic houses. Integral to this was learning the skills of using adzes and a variety of wedges for splitting timber, including how to split off different kinds of beams for different types of structures. After this had been achieved they would learn the art of woodcarving and painting. Ropiha stated that this learning took a period of twenty years, and this meant that a man did not become a tohunga whakairo (master carver) until he was in his thirties as it took a high degree of competence. Only a select few ever reached the skill levels to become a recognised tohunga whakairo.

In conclusion, with its celestial origins, knowledge in a Māori worldview has always been highly valued, with the transmission of this knowledge and access to its different layers being determined by privilege and status.

From whence they came: origins, myth and archaeology

Despite the plethora of ideas on the origins of Māori that occupied the intellectual pursuits of late nineteenth century and early twentieth century theorists, archaeological evidence recovered from sites of first settlement link early Māori settlers to Eastern Polynesia. The arrival date of the early Māori settlers has been the subject of intense debate amongst theorists, archaeologists and amateur historians, with some believing that the first wave of migration occurred in approximately 800-900 AD., with another migration taking place in 1100 AD. However according to Howe (2008:177) it is now generally accepted if not totally supported by

Western researchers, anthropologists and archaeologists that Māori arrived in the thirteenth century.

The Eastern Polynesians were themselves from Central Polynesia (Samoa and Tonga), having progressively migrated across the Pacific Ocean from South East Asia some 4000 years previous.

Early Māori shared material cultural traits with their Eastern Polynesian kin from the Marquesas and the Society Islands. There were also strong similarities in their traditions, with the feats of Maui being a common theme across the Pacific as well as shared beliefs regarding the origin of human kind. Oral traditions and written Māori mythology reflect the archaeological evidence with regard to where Māori had migrated from, but how this occurred was an issue of conjecture and discussion that occupied the scholars of late nineteenth and early twentieth century.

Sorrenson (1990:12) credits Captain James Cook and Sir Joseph Banks as being the first Westerners to notice the similarities between Māori and Polynesian peoples. This was due to the ability of their Tahitian translator Tupaia being able to communicate with Māori they came into contact with in their first voyage to New Zealand in 1769 and because Māori and Tahitians both had a tradition that they came from Heawije [Hawaiki]. On Cook's and other voyagers' subsequent visits, the origin of Māori and Polynesians became a subject of much speculation. Sorrenson writes about how the subject was also a matter of interest to the missionaries who came to New Zealand from the second decade of the 19th century. In Sorrenson's (1990:14) opinion, Samuel Marsden's belief that the Māori had a Jewish origin sparked an obsession that dominated the views of other missionaries, writers and adventurers for 20 years. Marsden based his views on the similarities between tikanga Māori and Old Testament events involving Jews and these observations were added to by those writers who agreed with him. The first and most influential work acknowledging the relationship between the Māori and Aryan races was written by Edward Tregear in 1885. Tregear based his

opinions on the similarities in language and symbolic representation of animals and implements. Sorrenson (1990:22) believes that Tregear's views received ridicule rather than praise, and by 1904, when he published *The Māori Race*, he had dropped his Aryan theories in favour of genealogies that were more in line with origins from India.

The notion of Aryan origins did not disappear with Tregear's concessions as John MacMillan Brown, Stephenson Percy Smith and Elsdon Best all promoted variations on this theme. The influence of each of these theorists was profound because of their academic reputations; MacMillan-Brown was Oxford educated and the Chancellor of the University of New Zealand, Smith was a founder of the Polynesian Society and a frequent contributor to early issues of the Journal of the Polynesian Society, and Best was a fellow founder of the Polynesian Society as well as the ethnologist at the Dominion Museum of New Zealand.

Stephenson Percy Smith's (1898) contribution to the scholarship surrounding the origins of the Māori became the pre-dominant theory in the early to mid-20th century and was based around the migration of Māori to New Zealand in a great fleet of canoes. Canoe traditions had been collected by several other writers earlier in the 19th century, however Smith's theory of the great fleet became the accepted theory. To prove the authenticity of his theories, Smith relied on the genealogical tables to prove that Kupe had discovered New Zealand and had returned with the fleet. Simmons (1976) revealed that Smith had manipulated genealogical records to prove his theories. These manipulations are said to include adding extra generations when the dates of discovery failed to agree with the genealogical record, stating that there were two Kupes (when faced with evidence that Kupe appeared later in the genealogical record) and that the waka, Tokomaru, made two voyages. Smith is also responsible for perpetuating the myth that there was a tribe

of people in New Zealand before the Māori arrived known as the Maruiwi (or the Moriori or Mouriuiri), whom the Māori exterminated.

The collecting of Māori mythology and oral tradition was a popular pastime during the 19th century, with prominent figures such as Edward Shortland, Reverend Richard Taylor, Sir George Grey and John White all publishing major volumes of mythology (including migratory stories) during this period. The stories were recited by key informants and John White paid literate Māori for stories they wrote for him in notebooks. The authenticity of these stories is debatable as it is thought that entrepreneurial Māori made up stories to get payment. Linda Tuhiwai Smith (1999:170) notes that most of what is written about Māori in the nineteenth and twentieth centuries by western authors has become part of the country's common knowledge and has ideologically "distorted notions of what it means to be Māori". She cites Elsdon Best's comments made in *The Māori as he was*, where he described Tuhoe women as being looked upon as being inferior to men. This, Smith contends, is in stark contrast to the view held by well known educationalist Rangimarie Rose Pere, who states that she had been exposed to very positive female role models, with both senior men and women of the tribe making it clear that men and women, adults and children, work alongside each other and together.

In conclusion, influential western anthropologists, historians and archaeologists, from the later part of the 19th and the early 20th century, used traditions to romanticise their theories in regard to Māori origins. The manipulation of these traditions by these scholars and the subsequent promotion of their theories in their literary pursuits became accepted at the expense of the Māori oral record.

Environmental and astronomical information indicators

The relationship between Māori and the environment is based on the common whakapapa links back to Ranginui (sky father) and

Papatuanuku (earth mother). This relationship means that humans have a responsibility to ensure that the mana of the land, waterways and forests is upheld. This is a core component of the worldview that Māori and other indigenous peoples hold.

Best (1942:33-34) described Māori as observing the plant life and stars to assess whether the forthcoming season would be plentiful or lean. An example of this was scanning trees to detect signs related to their blossoming, with it being known that certain trees blossom more profusely every third or fourth year. Another example included the monitoring of trees to see whether they blossomed at the top or the bottom first. If the blossoming starts on the lower branches first, then a warm and bountiful season will follow. If the tree blossoms at the top first, then a cold, unproductive season follows. Another information indicator identified by Best was the use of bird movements to indicate the nature of forthcoming seasons: “if the season is to be fruitful they will fly upward in flocks, then swoop down with extended motionless wings, then after gambolling about on high for awhile they will alight”.

Other signs of forthcoming seasons are provided by Best (1942:33-34) and these include earthquakes; no earthquakes during a season indicate a lean season will follow, whereas frequent earthquakes mean that a fruitful season will follow, with food products and all other things flourishing. The same principle was applied to rain patterns:

“if rain and fine weather continued to alternate month after month then an unfavourable season would follow; but if there was little rain then a good season would follow, favourable for growing food products, a plentiful season, land, food-plants and man all prospered”.

Other information indicators highlighted by Best included the lunar cycle, particularly the length of the days and nights, with longer nights an indicator that food supplies would be plentiful and that the next month

would involve a change in the sun's direction. The three months after this were associated with the cold and frost, followed by warmer months which signalled the arrival of spring, and the move to crop planting, followed by months when crops began to furnish a good food supply.

Star patterns were another form of knowledge used by Māori to assist them with their hunting and crops. One star pattern that was particularly important was Matariki (Pleiades). These stars were closely examined as a means of forecasting the weather for the next season. If the stars were indistinct and quivering a poor season would follow; if each star stood out clearly and distinctly a warm, prolific season would follow. To other iwi, particularly those in the far north, South Island and the Chatham Islands, it is Puanga (Rigel) in the constellation of Orion that is the signal for the start of the New Year. Puanga appears brilliantly at dawn in the east, around mid-June. Close attention would be paid to the direction of her rays; if these were directed southwards there would be a poor season for crops, but if they were northward all food would be plentiful. Information was also discernable from other star constellations, with the appearance of Takurua (Sirius) being associated with the arrival of the cold weather, frost and snow. Rehua (Antares) is known as the brightest star in constellation of Scorpius and its appearance is associated with the arrival of summer.

Stars and constellations were not only important to the planting and harvesting of crops and other food supplies; knowledge of their positions and movement were at the core of navigational systems in ancient voyaging. It was particularly important to know the positions of stars as they cut the horizon, and their patterns of rising and / or setting was the basis of the star compass. The kaihautu of these waka needed to know which were the fixed stars and their relationship to other stars, with there being an expectation that one or two well known stars would be visible at any time of the night, thus providing a clear pathway to follow.

Best (1922:28), in discussing navigational issues, uses the example of the voyage of Takitumu from eastern Polynesia to New Zealand, stating that Puhi-whanake and Whatuira were the two expert star-gazers. The task of these two men was to scan the stars and provide information on directions to those steering the waka, and to foretell any weather conditions that would have an impact on the passage. According to this tradition, the stars relied on during the voyage of the “Takitumu” were Atutahi (Canopus), Tautoru (Orion's Belt), Puanga, Takurua, Tawera (Venus as Morning Star), Meremere (Venus as Evening Star), Matariki, Tama-rereti (Tail of Scorpion), Te Ikaroa (the Galaxy). Best admitted that he was ignorant of the point in the voyage when the steersman would commence to steer by a particular star in preference to another. However, Taonui (2009) states that “when the star rose too high in the sky or set beneath the horizon, another would be chosen, and so on through the night. Seven to twelve stars were sufficient for one night's navigation, and the moon and bright planets such as Kōpō (Venus) and Pareārau (Jupiter) were also useful. At daybreak, navigators noted the position of the canoe in relation to the rising sun. As the sun got higher in the sky, they looked to where it would set in the evening”.

In conclusion, like the other forms of knowledge already discussed, the environmental information indicators trace their origins back to their relationship with atua Māori through whakapapa. This relationship is one of the core components of Māori and other indigenous peoples' worldviews, which recognise the close bond between humanity and the natural world and are reflected in the responsibility of humans to care for the land and other resources for future generations, so that in return these resources will provide sustenance.

The information of language

Te reo Māori is a member of the 1200 strong Austronesian language group, which spans the South East Asian and Pacific regions. As a

language, te reo Māori is closely related to Tahitian and Cook Islands Māori, consistent with known archaeological evidence that identifies Māori as having originated from East Polynesia. Although te reo Māori was quite possibly at the time of this migration a unified language, over time dialectical differences emerged, with linguists⁴ identifying three major dialects: Eastern North Island, Western North Island and South Island Māori. Differences in te reo Māori from other parts of the country are described as regional variations rather than dialects.

Until the early nineteenth century, te reo Māori was the dominant language of New Zealand, with the arrival of missionaries and settlers bringing English and other European languages. The impact of the missionaries and their schools is discussed elsewhere in this chapter, but needless to say the introduction of English was a catalyst for change.

Te reo Māori was not only a language for communication and conversation; it played an important role in the sense that it was also the language of the land. As such it was used as a means of naming places, landscape features and natural resources, and these names became an indicator of the significance of these places and provide a rich tapestry of knowledge. Examples of this include a hill in Hawke's Bay called: Taumatawhakatangihangakoauauotamateaturipukakapikimaungahoronu kupokaiwhenuakitanatahu, which Wise's Guide (1979:420) translates as the "hill where Tamatea the man with the big knees, the climber of mountains, the land-swallower who travelled about, played his nose flute to his loved one". Similarly the name Manawatū is derived from the reaction of Hau (a well known Māori name giver) whose breath stood still when confronted with the depth, width and coldness of the Manawatu River as he crossed it (McEwen, 1986:16). Other common protocols with regard to naming places was to name them after people associated with that land or landscape features, with Walker (1969:405) stating that

⁴ http://www.Māorilanguage.info/mao_lang_faq.html

personal and place names were of “functional significance in pre-literate Māori society as the fixed points of reference for orally transmitted traditions” being the “immutable, tangible markers of tradition”. Examples of places named after people or features of the landscape include Otane (place of Tane), Otara (place of Tara), Tararua (named to indicate the twin peaks of Pukemoana and Pukeahurangi), Paeroa (long mountain ridge) and Tauranga (a safe place for landing canoes).

By their very existence, the names that Māori applied to the landscape around them mapped the relationship of one landmark to the next; as such the names themselves provide the key, with the understanding of one name being dependent on the other markers they connect to. The names were often named after the exploits of an ancestor who journeyed through the land, or after important events such as sites of famous inter-tribal battles. This means that the placenames were embedded in the history and traditions of a hapu or iwi, and could serve as another mnemonic to remind them of events and ancestors, thus safeguarding the memory.

Walker (1969:406-407) identifies that the manner in which proper names were used in the account of creation, and the myths and legends that followed, as a demonstration of the importance of the use of these names to Māori. Of particular significance was the use of proper names in Nga Tama a Rangi (the Sons of Heaven), the Maui cycle and the Tawhaki (Tane) cycle myths where Walker notes that in all of the “events depicted, heroes, villains and houses are all given proper names”, with Walker stating that the names of enemies and enemy tribes were always identified and never anonymous due to the need for these enemies’ actions to be avenged. Thus, the action of giving these significant names to children and descendants was one way of ensuring that the names of these individuals and places were remembered appropriately.

In conclusion, although te reo Māori only became a written language in the early nineteenth century, its legacy had already been recorded through the placenames and proper names given to geographical features and people respectively.

Artistic information indicators

As noted earlier in this chapter, Sir George Grey was an enthusiastic collector of manuscripts. One of these was written by Wi Maihi Te Rangikaheke and quoted by Mead (1986), and spelled out the qualities expected of a chief. These were listed as follows:

A chief was expected to be brave, a good warrior, wise in council, excellent in keeping the food storehouses full, able at oratory, good at looking after people (the quality of manaakitanga) and good at art. Especially, he should be able to build or to negotiate the building of large houses such as storehouses, chief's houses, cooking sheds and canoes. Such structures would provide proof of skill and knowledge. But over and above the practical considerations of the resources and prestige of a hapu he should be artistic.

Himiona Tikitu, an informant of the ethnologist Elsdon Best, was another to describe the qualities that a chief should possess and these were recorded by Best in one of his field notebooks, cited by Mead (1986:190-191). These ideal qualities were described as:

eight openings of the heart or simply eight talents of a chief. Besides the expected qualities of bravery and courage in war, there were also the values placed on the food quest, on knowing the political boundaries of the tribe's land area, on the ability to mediate in disputes and settle disruptions within the group, on being generous in hospitality and being kind to people.

Tikitu also specified the knowledge to build houses, forts and canoes as a necessary talent, again placing a value on structures that were vital to the needs of a community. The chief was expected either to build through his own active participation, or through organisational and economic skill to have such prestige items built by others on his instructions. He was expected to be a skilled carpenter, canoe builder, carver and painter as part of being the complete chief.

As already stated, like other preliterate societies, Māori relied on oral transmission of knowledge. However oral tradition was not the only form of information available to Māori. Information also came in the form of the cultural and spiritual arts of ta moko (tattooing), whakairo (wood carving), tukutuku (latticework weaving), karakia and waiata (sung poetry).

To the uninformed these art forms may appear relatively simplistic, but all have an underlying complexity when it comes to expressing and transmitting knowledge.

Ta Moko

In describing moko, Te Awekotuku (2007:208-09) states that it has many meanings to those who carry it. Moko is about identity: about being Māori in a Māori place, being Māori in a foreign place, being Māori on Māori terms. It is about survival and resilience. It reflects Māori relationships with others; how they see Māori, and more importantly, how Māori want to be seen."

Simmons (1997:130) identifies ta moko as being focused around the concept of mana - power, prestige and worth - as well as linking it to tapu, with individuals that have a direct descent line from the gods being

described as having the most tapu. In describing this hierarchy, Simmons places taiopuru (chief of chiefs) at the top; at the bottom is the tutua (slave), with very little mana or tapu. Simmons' writing was informed by Te Riria.⁵ Te Riria identified eight different ranks, each with their own distinctive tattoo marks which mapped the status of the person that wore it.

Te Riria's knowledge and writing is firmly based in the hierarchical model determined by the Ahupiri Council, which is linked with United Tribes Confederation. Some scepticism surrounds Te Riria's claims to his title as Taiopuru, however his text on tattooing is one of the few written on the meaning of different patterns.

In stating that there are eight ranks, Te Riria noted that an individual could formally rise in rank if this was approved by the whare wananga or the Ahupiri council and the Taiopuru⁶. Such a rise could be for the lifetime of the recipient or be hereditary, and would be marked as so on the moko. Matters were further complicated however, when people of high status were also servile to chiefs of the upper levels, either as soldiers, gardeners or as servants. Te Riria states that these people were marked with their status and their occupation.

Te Riria's text provided visual examples of different patterns that were applied to those of different levels, with there being eight symmetrical areas on each side of the face. According to Te Riria, the right hand side of the face reflected the rank and tribal affiliations of the wearer's father and the left hand side provided similar information on their mother.

⁵ Te Riria is a member of the United Tribes of New Zealand – based in the Bay of Islands

⁶ Taiopuru is the title given to the paramount Chief of the United Tribes

Other indicators were the spiral patterns found at the top of the nose and referred to the wearer's specific knowledge, with Te Riria providing the examples of a circle made with two lines indicating that the individual is a teacher of weapons; an open spiral with one point curling just inside the other indicates a teacher of gardening; a circle broken near the eye by three lines crossing it is worn by a storyteller, an expert teacher of tribal history. The individuals with open spirals on the nose were tohunga of the whare wananga.

The female moko also marked different levels, ranks and occupations. Women of lower ranks or levels protected by someone of a higher level were marked by a moko. Back and leg tattoos were also used as another marker particularly when a woman was married into another tribe, the tattoo being a visible sign of the relationship.

Whakairo

Similar information is able to be determined from whakairo, with W.J. Phillips (1997:6) describing carving as the

writing of a people who never needed a written language. All the national conceptions of ancestor respect and allegiance, man's struggle to choose between good and evil, love of children, pride, suffering and defiance are there to be read by the initiated.

The Williams (1957:80) dictionary definition of whakairo is "to ornament with a pattern".

Barrow (1969:9) identified wood carvings as being an historical record for pre-European contact Māori. This was mainly due to the depictions of ancestors that were carved and displayed on the walls of meeting houses, which he believed were useful when recounting the heroic

deeds of these ancestors. Barrow also identified these carvings as useful in helping to instruct the young, “by oral transmission through visual symbols... the lively stories of brave deeds inspired the living, who believed the ancestral spirits watched over the living and that the carved images were their material vehicles”.

Mead (2003:255) describes how, like other arts, whakairo originated from the gods and how the divine origins explains the tapu nature of the arts. In the case of whakairo this was through the descent line of Tangaroa. The origin is said to have been through Ruatēpūpū performing a bad deed and as a consequence being forced to sacrifice his son Manuruhi to Tangaroa. When Ruatēpūpū went to search for his son he found a fully carved meeting house on the ocean floor, where his son had become a decorative bird on the gable of the carved house. Although his son had become a bird he was still able to move and to communicate, as were the other carved figures. Together, father and son hatched a plan to set the house on fire and Ruatēpūpū took the tekoteko (carved figure at the apex of the house) and poupou (ancestor post) back to Earth.

Whakairo is typically considered to be in the domain of whare tupuna (ancestral house), with the carvings within and on the outside of the whare tupuna reflecting the history of the people affiliated with that place and the relationships they had with other peoples.

Barrow (1969:68) notes that “the sacred art of the Māori carver was maintained throughout the centuries by a succession of masters working within tribes, sub-tribes, and the individual families who specialised in carving art”. These individuals were considered to be tohunga, with the master carvers, known as tohunga whakairo, being regarded as priests of a kind, which in turn reinforced the spiritual connection between the carvers, their ancestors and the atua Māori.

Master carver Hone Taiapa is quoted in Skinner (2008:56) as saying that the carver had to learn to carve by observation and by memorising the information, so that it became part of their mental repertoire. Taiapa identified this as “a template being inside the carver’s head not in a book, or in a stencil that exists outside of the person doing the work. This template becomes modified by the carver’s memory”.

Different regional styles existed, reflecting the tribal traditions for those areas. These styles were not restricted to those areas but also influenced the styles in other parts of the country. For example, Mead (1986:57) notes that the partners in the Taranaki tradition are Ngati Mutunga, Te Ati Awa, Taranaki, Ngati Ruanui and Nga Rauru. However, he also states that it is “possible that the style known as Whanganui came out of the same tradition and if this is correct the tribal styles of Te Ati Hau and Ngati Apa are derived from and related to the earlier Taranaki tradition.”

Carvings were used for a range of other purposes including boundary markers, waka tupapaku (burial chests), hoe (paddles), waka huia (treasure boxes), kumete (wooden dishes), pou (carved palisade posts), tauihu (canoe prows) and tokotoko (carved staff).

Tokotoko came in a variety of styles and Mead (1986:181) believes that they should be personalised rather than general, so that the staff was “rich in korero, in proverbs and tribal sayings”. Typically the carvings would represent important ancestors and serve as mnemonic for the orator when they were speaking. Mead (1986:178) also notes that the staff not only provided information for the orator while he was speaking, but was a means of transmitting information to those present at a powhiri (welcome) or other ceremonial occasion. The messages provided through the possession of a tokotoko are;

“First, the owner of the stick is an orator. Second, he has the authority to speak and the group with whom he appears recognises tacitly his right to speak for them. As these two messages are associated with the duties of an elder, another function is to let the spectators know that the speaker is able to play such a role whether he is old or not.”

Waiata

Waiata translates as sung poetry, although this term is used widely today to label Māori musical performance. McLean (1996:110) states that the term waiata is a term “used loosely for all songs of a melodic nature”. There are many types of waiata, with Mitcalfe (1974:4) quoting William Colenso as observing that there were over 30 different types of waiata, including waiata tangi (laments), waiata aroha (love songs). and specialised forms such as patere (abusive chants) where the words often recall personal or tribal quarrels or recount injuries done to ancestors, ngeri (derisive songs), hanihani (song to shame or abuse someone), haka (war chant / dance) and oriori (lullabies).

In the modern era, waiata are used in a variety of situations but are typically used to support a speaker’s sentiments either at powhiri, tangihanga or other special occasions such as weddings, conferences or celebrations. The type of waiata chosen by the group should always be appropriate to the occasion, so as not to cause offence to the audience or show up the speaker that is being supported.

Waiata continues to be important because the text of the songs encapsulate a host of cultural symbols which are meaningful in the present context. These symbols also provide a link with the distant past, that is with the symbolic behaviour of the ancestors. The texts also serve as reminders of some of the cultural values of the people. For

example, there is a high value placed upon the ancestral lands and upon the concept of tūrangawaewae (owning a piece of land as a “place for the feet to stand” and as a condition of group membership). References to symbols of ancestral lands are numerous in Māori chants and thus performances of such songs help reinforce the value associated with the symbols. Other equally important values such as mana, personal tapu, primogeniture, high genealogical position, success in war, success in love, group solidarity and ancestor worship, are reinforced in a similar way.

In conclusion, the information contained within Māori visual and performing arts is representative of the stories contained in traditions and tribal history, and in a pre-literate society these arts were another method of storing knowledge for the benefit of the generations to come.

Assimilation, integration and urbanisation

By the end of the nineteenth century, the Māori population was in serious decline and it was widely doubted by many commentators that Māori as a population would continue to exist. Durie (2005:30) identifies the causes of this depopulation as including the introduction of European diseases which Māori had no immunity to, increased mortality through inter-tribal wars due to the introduction of the musket, changes in diet, increased demoralisation through changes to social and economic structures, and the forced alienation of Māori land. Durie argues that the correlation between land loss and population decline is demonstrated by the fact that in 1800 the Māori population was 150,000 and land ownership totalled the entire 26.7 million hectares, while by 1901 this had declined to a population of approximately 43,000 and land ownership in the vicinity of 2.89 million hectares. According to Durie (2005:16), the threat to Māori was highlighted as early as 1846 by Dr Issac Featherston, a physician and future politician and cabinet minister

in the Fox Ministry of 1861-62 who was talking about Europeans “smoothing the pillow of a dying race”.

Walker (2004:147) identifies firstly the mission schools and later the native schools as the instruments of assimilation used by successive governments to achieve “cultural surrender”. Instructions to the schools to outlaw the use of te reo Māori in the playground were also applied to the classroom. Those Māori children who failed to comply with these instructions were subjected to corporal punishment. This practice continued for approximately fifty years and Walker believes that the psychological impact of the policy on an individual's identity and personal worth was worse than the effects of the physical punishment. The impact of the policy is illustrated by Walker who states that in 1900, 90 percent of Māori new entrants were able to speak Māori but by 1960 this had decreased to only 26 percent of young children being able to speak Māori.

Research undertaken by Richard Benton (1979) for the New Zealand Council for Educational Research showed the perilous state of the language. Benton's study revealed that fifty percent of the Māori population was under the age of fifteen, with only fifteen percent of these being able to speak te reo. In contrast, those in the age group of 45 and over only made up twelve percent of the Māori population but accounted for 38 percent of those who could speak Māori. This was seen as a major concern due to the high mortality rate in this age group. The renaissance of te reo was driven from the grass roots upwards through the creation of kohanga reo (language nests) as a pre-school option for Māori. The first of these were established in the early 1980s and was a community-driven effort, rather than being government funded. The need to provide education to the graduates of kohanga reo (language nests) led to the creation of kura kaupapa (Māori immersion schools), and later on wharekura (secondary schools). Although these institutions have

made a major contribution to a resurgence in the numbers of te reo Māori speakers, the language is still in what is known as the revitalisation phase.

The other weapon of assimilation was the Native Land Court, which facilitated the transfer of land from Māori ownership to ownership by the Crown and settlers. Land was also alienated by confiscation following the land wars. As previously mentioned, the level of land ownership by Māori had been drastically reduced and the method of land ownership had radically changed. Rather than having a method of traditional ownership, which was firmly based in collective ownership, the *Native Land Act 1865* simplified matters by restricting the number of owners on a title to no more than ten people. In effect this policy made it much easier for the land to be on-sold. Kawharu (1977:294-96) credits the *Native Land Act* of 1862 and 1865 with leading the way for large-scale alienation of land and with being responsible for the dismantlement of a system of social and economic organisation centred on collective ownership, undermining the authority of tribal leaders and paving the way for fraud and misappropriation to occur.

Tohunga Suppression Act 1907

The passing of the *Māori Councils Act* in 1900 was the forerunner to making the traditional practices of tohunga illegal. This legislation was designed to make it necessary for Māori communities to become more health conscious and to regulate some aspects of traditional tikanga, such as setting a limit of four days for tangihanga and storage of corpses. Advocates of Māori health reform, Maui Pomare, Apirana Ngata and Peter Buck focused on sanitation and hygiene, particularly water supplies. This drive for health improvements was further enhanced by the passing of the *Tohunga Suppression Act 1907*, which was used by the New Zealand Government to suppress ancient healing practices

of Māori. Although the debates in the New Zealand House of Representatives focused on outlawing the prophet movements such as Rua Kenana's at Maungapohatu in the Urewera country, this was only one of the four purposes of the Act, with the other three purposes focusing on 'superstitions', such as the use of supernatural powers to heal or foretelling of future events. The result of the passing of the statute was to drive traditional Māori healing practices underground, although Stephens (2001) believed that this was more from fear of accusations by fellow Māori than Pākeha authorities, with political and tribal rivalries more likely to be behind many of the accusations and prosecutions that were made under the auspices of this Act.

Urbanisation

Before the Second World War, only 20 percent of Māori lived in an urban environment, with the other 80 percent being based in traditional tribal territories in rural settings. The war and the resultant 'baby boom' in the post-war years led to the development of a manufacturing led economy at the same time that traditional employment areas of horticulture and agriculture were undergoing changes lessening the need for labour. Māori left their tribal areas and shifted to the cities en masse, to take advantage of the new wealth and plethora of employment brought on by industrial technology in the factories. The influx of Māori into the cities led to the promotion of a policy of integration by the government of the day through the Hunn Report (1961), which assumed that urban Māori would become more like Europeans and would leave their traditional practices and beliefs behind.

Having survived previous policies such as acculturation and assimilation, Māori responses to the policy of integration was mixed. Some Māori integrated and became 'model citizens', some Māori maintained their links with their tribal roots and some developed new relationships with

other Māori, with less emphasis on the concept of iwi-tanga (tribally based knowledge and groupings) and more on developing urbanised pan-Māori affiliations. However Durie (2005:21) cites Hunn's report as identifying a new class of urban dwellers who were Māori, poor, unhealthy, housed in substandard homes, more likely to offend and less likely to succeed at school.

Despite a policy of pepper-potting whereby Māori families were to be dispersed around the cities, the reality became suburbs with large proportions of Māori population, leading to the development of new affiliations. These new affiliations led to the development of whānau-oriented situations which paralleled traditional whānau models, but were less focused on common descent and whakapapa and more to do with shared experiences and values. Over time these whānau became more organised and this led to the construction of urban marae. In some instances these marae had no affiliation other than the urban whānau and were pan-tribal, such as Hoani Waititi Marae in West Auckland or Ngā Hau e Wha Marae in Christchurch. Others belonged to urban residents of iwi, such as Te Tira Hou marae in Panmure which was built in the 1970s and is affiliated to the Tuhoe iwi. (Walker, 2004:200-201)

Urban Māori did not only rely on marae for their social needs and became heavily involved in other activities including those relating to welfare, with Walker (2004:202) identifying groups such as the Māori Women's Welfare League and Māori Wardens being of major importance, as well as sporting and church related organisations. These activities led to the strengthening of ties between the individuals and whānau groups involved, through shared values based on tikanga Māori principles.

Over the last decade, cities such as Waitakere and Manukau have witnessed the development of strong entities in the form of urban

authorities, which are pan-tribal and deliver a range of social services in welfare, health and education and have lobbied extensively to be recognised as iwi in their own right.

The focus on urban Māori movements has gone part of the way to restoring a sense of identity lost to Māori with the shift to the cities. For those who have become alienated from their iwi, these urban entities provide an environment where they can be Māori, learn tikanga and develop a sense of ancestry. Others in this environment are unlikely to be judgemental, as so many of their fellow urbanites are in the same predicament and this brings about a sense of community that involves co-operation, collaboration and support.

It is also highly likely that the information exchanged in this environment is not so focused on cultural issues. The major urban Māori movements in Auckland are involved in the delivery of social services including education, welfare, health care, financial services and employment services. Thus the information created, shared and exchanged is just as likely to revolve around these everyday issues as it is on cultural matters.

In conclusion, the information environment that urbanised Māori found themselves in was vastly different to their rural origins. As adaptations were made to lifestyles, changes were also made in the way that information was communicated and preserved for future generations. Unfortunately not all were able to make the necessary adjustment and consequently they became separated from information that underpinned their sense of identity as Māori.

The digital age

In the space of less than 20 years, Māori knowledge has undergone a transformation, in the sense that written information sources in the form of books, manuscripts, letters, diaries and whakapapa books have gone

from being physical items to being available in an electronic or digital format. Most, if not almost all, of it is stored on a server or a portable storage device, such as compact discs or a detachable hard drive. Information that once may have been restricted can now be made available to anyone with the technology and the skills to access it. This transition has provided new opportunities for Māori that were previously disenfranchised, but it has made Māori knowledge more accessible and less subject to control. The digital age was preceded by the microform period. Microfilm was predominantly used to film scarce items or large collections of material that may also be difficult to store or disseminate, such as collections of newspapers. For Māori, one of the more notable items to be microfilmed was the *Māori Land Court Minute Books*; this was done by the Church of the Latter Day Saints who used the whakapapa information within them for their genealogy database. This project not only gave the Church the data they needed but made the minute books far more accessible to libraries and other heritage-focused institutions that were able to offer them to their clients.

In the early 1990s, the Alexander Turnbull Library made several Māori information sources available on microfiche. The main resources of interest were *Turton's Land Deeds*, which provided information about land purchases in the North Island; *MacKay's Compendium* of land documents for the South Island and the *Māori niupepa* (newspaper) project. The Turnbull also made their indexes to the *Listener* and *Biographies Index* available, both of which contained information on Māori topics. Turton's and MacKay's compendiums were rare items that contained information of high importance to hapu and iwi who needed to trace the alienation of land before the Native Land Court came in to existence. By providing these sources on microform, the Turnbull were able to ensure that they were readily available in libraries and affordable for any group wishing to purchase them. The Māori niupepa project provided 17,000 pages from 34 different Māori newspapers published in the 91 year period between 1842 and 1933. Like the Turton and

MackKay publications, most of these newspapers were quite rare and the microform project made them accessible. As 97 percent of the pages are in te reo Māori or bilingual, the collection of newspapers are an extremely valuable resource for learners and speakers of te reo.

The development of film, audio tape and the subsequent introduction of digital imaging have led to a treasure mine full of information being available in repositories. King (1996:1) places the date of the first photography to take place in New Zealand as in the late 1840s, but it did not become so common until the 1850s when the technology had advanced enough to make photography more portable. Māori subjects were enormously popular and this includes the photography of individuals (particularly those with moko) and events. Later in the century, Māori were photographed in increasing numbers so they could be depicted on picture postcards.

In the early years of the 20th century, photography was joined by moving film. The film was able to capture important events, examples of tikanga Māori and Māori artistic practices in action. In the later part of the century, the use of audio and visual recording devices became useful tools for the recording and filming of oral history, capturing key events and the stories of individual Māori. These would typically then be stored in a library or iwi cultural centre.

In the 1990s the transition from 'old technology' such as microform, video and photography to 'digital technology' started to occur. This shift was centred on the development of the Internet, which gave individuals and organisations the ability to easily share data across electronic networks. Early developments in the web-based environment were focused on the development of an electronic presence. Organisations and individuals created websites and databases, participated in bulletin board discussions and exchanged emails. Over time, as software and

technological tools improved, websites and databases became more sophisticated and started to develop full text content that had been created or adapted from the original data sources. Improvements in scanning technology and character recognition software enabled the development of digital facsimiles of original information resources. A further enhancement in web technology has seen the development of Web 2.0 tools that allow content to be easily added to sites created and maintained by individuals.

In conclusion, this chapter has identified how the information sources used by Māori have radically changed the way that Māori make sense of the world they are part of. Part of this change is the transformation of information from being available only to a hierarchical elite to being accessible to all. The change occurred through the introduction of new worldviews and tools of knowledge transmission, including literacy, education and western religion. As tools have continued to evolve over the 195 years since first contact with missionaries, the result has meant that in the world of the 21st century Māori students can choose to retrieve, share or exchange information using a range of technological and interpersonal techniques, and a variety of formats.

With this chapter having described how the Māori information world has evolved, Chapter Two will focus on how these changes have impacted on Māori secondary school students in the 21st century where, although they place tremendous value on inter-personal contact, there is incredible difficulty in maintaining this due to the changes brought about to the delivery and exchange of information through the use of sophisticated information technology.

Chapter Two

The contemporary Māori information world

Chapter One outlined the change agents that have led to the transformation of the Māori information world, from being primarily focused on oral and visual means of information sharing and exchange to an environment that not only includes those elements but also provides a range of highly sophisticated information and communication tools. The aim of Chapter Two is to identify how relevant these tools are to Māori students. It focuses on the state of the Māori information world as it is today, by assessing the relevance of the information indicators identified in Chapter One and how they are represented in a twenty-first century context.

The youth involved in this research project were born in the years 1989-1992 and, at the time of their entry into the world, New Zealand had and was continuing to undergo significant societal changes in its race relations, and the economic and social well-being of Māori. Key elements involved in this change were the decision to grant retrospective powers to the Waitangi Tribunal, recognition of te reo Māori (Māori language) as an official language of New Zealand, appointment of New Zealand's first (and still only) Māori Governor-General, and the success of the Te Māori exhibition overseas and its triumphant return tour of New Zealand.

New Zealand was also on the cusp of celebrating 150 years of nationhood since the signing of the Treaty of Waitangi, with an increased consciousness of what it was to be a modern New Zealander. The fourth Labour Government, which had been involved in many of the changes in the 1980s, was coming to the end of its reign, but was also in the act of changing the structure of how Māori would receive social and

other services traditionally delivered by the Department of Māori Affairs. Under Labour's plan these were to be devolved to other government departments and mandated iwi (tribe) authorities. Although this decision was reversed by the incoming National Government in 1990, a number of iwi had already established themselves as iwi authorities and were in the process of developing and delivering social services to tribal members. Many of these entities have since accelerated their growth in the post-Treaty settlement environment, through financial and property investments.

Creation

In considering what impact the creation sequence has had on the contemporary information world, it must be remembered that in the traditions about the creation of the universe, the atua (gods), natural resources and humans can all be attributed to the descent from Io, the supreme being. The creation of human knowledge, information and how Māori make sense of the world is a vital part of this process. The key to understanding all of this is underpinned by the concept of whakapapa (genealogy). The literal meaning of whakapapa is 'the layering of one thing upon another' and in a Māori worldview it provides the framework for explaining the relationships between individuals, whānau (extended family), hapu (sub-tribe) and iwi. It also explains how the relationship between human kind, the gods and environment is structured. Barlow (1991:173) states that "every thing has a whakapapa: birds, fish, animals, trees, soil, rocks and mountains".

Te Maire Tau (2001:8) defines whakapapa in a similar manner by describing whakapapa as the "paradigm of the Māori world view. Time, space, emotions, plants and animals are all understood by way of whakapapa" and through this link he explains that whakapapa provides a "metaphysical framework to place oneself within the world" as

“individuals within iwi are able to link themselves to flora, fauna, minerals and celestial elements by whakapapa”.

Thus, without whakapapa, mātauranga Māori (Māori knowledge) would have no foundation, which from a Māori perspective would leave mātauranga Maori in Te Kore (the void), either in a state of confusion or waiting for its potential to be discovered. Whakapapa therefore legitimises not only Māori knowledge but the very existence of humans who are responsible for its protection, preservation and, where appropriate, its dissemination.

In conclusion, in the contemporary world, knowledge of one's whakapapa is a critical component of Māori identity. Whakapapa links an individual to their whānau, hapu and iwi and to the natural world, providing them with a legitimate right to their heritage.

The origins of knowledge

The explanation of how the three baskets were acquired from the highest heaven, the realm of Io, links the sanctity of knowledge to a relationship with the gods, thus confirming that its status is of the utmost importance. The heavy emphasis on history, tradition and whakapapa on one hand, and the practical knowledge used to ensure Māori economic and social well being on the other, is indicative of the hierarchical nature of information in society. As whakapapa is the cornerstone of mātauranga Māori, knowledge and expertise in this area is highly valued. However, the practical skills from Te Kete Aronui (basket of everyday knowledge) are also vitally important to survival of the whānau, hapu or iwi unit. The skills and knowledge that emerge from each of the baskets affirms the hierarchical nature of information in everyday life, however they also confirm that whānau, hapu and iwi need contributions from every quarter for the unit to operate effectively. This, in a sense, reflects the need for

the whānau to incorporate core values such as whakawhanaungātanga (relationship building), mannaakitanga (hospitality) and tau-utuutu (reciprocity) into their unit. These values ensure that the kinship unit is well served through the contribution of all its members.

In conclusion, the knowledge received from the three baskets remains relevant to this day as it represents the foundation of how Māori are expected to act and relate to each other. This is recognised through the formal and informal aspects of tikanga Māori, which governs customs in Māori contexts, particularly in marae based encounters associated with powhiri (welcome), tangihanga (funeral rites), and representations of tapu (sacredness) and noa (profane).

From whence they came: origins, myth and archaeology

The arrival of Western explorers and settlers in the late 18th century and beyond saw the meeting of two value systems. The fascination that these Europeans had with Māori led to the exploration of why they had chosen New Zealand, how they had managed to get here from Polynesia and what their origins had been prior to that. The collection and publication of oral traditions by Europeans led to the interpretation and application of Western principles and values to Māori traditions. These interpretations were shared extensively through the accounts of travel written by explorers, adventurers and early settlers in journals and diaries. As it has been demonstrated with regard to Stephenson Percy Smith's work, any discrepancies between the traditions and their own views were either overlooked or manipulated.

The introduction of Christianity and Western education systems led to a change in how Māori viewed the world. The main agents of change were the Holy Bible and literacy. The early missionaries started writing down the Māori language and arranging for the publishing of written grammars

and vocabulary. The development of mission and, later on, Native schools led to literacy becoming wide spread, and the translation of the Bible into te reo Māori (Māori language) assisted in the uptake of Western ideas and values. As a result, these values infiltrated the traditions and mythology of Māori, and became the norm rather than the exception. Sorrenson (1990:52-54) highlights this by citing the criticisms made by Bishop Herbert Williams of the *Lore of the Whare Wananga*, stating that Percy Smith's primary informant, Whatahoro Jury (from the teachings of Te Matorohanga) and one of the other scribes had both been educated at mission schools, and that this was likely to have had an effect on their transcription and interpretation of the information that appeared in the teachings. Williams was not alone in his criticism of Best and Smith's references to Io; Sorrenson (1990:78) refers to Hammond and Haddon as others who were wary of the influence that the missionaries had over Best and Smith's informants. Haddon (1914:56), a British anthropologist, likens Tāne's collection of the three baskets of knowledge from Io to the biblical story of Moses collecting the Ten Commandments.

The development and embellishment of traditions surrounding the migration of Māori became part of the national psyche, and was perpetuated through the education system along with the Moriori myth.⁷ To some degree the fleet myth continues to flourish today, in that most Māori include an acknowledgement of a waka (canoe) in their pepeha (identifying chant). Although there is some basis to the theory that these waka existed, they were linked to internal migration within New Zealand. This theory of internal migration is supported through the ability within some iwi to be able to whakapapa back to the commanders of these waka.

⁷ The Moriori (Maruiwi or Mouriori) were described as a non-Polynesian peoples who were the original inhabitants of the land, and were slaughtered by Māori. The plight of the Moriori was used as an excuse by those who were attempting to justify the reasons for Europeans taking Māori land, as they had done the same to Moriori. Archaeological evidence has proven that the earliest inhabitants of New Zealand were from East Polynesia and adapted and changed in their isolation to become Māori.

The introduction of literacy by the missionaries was the beginning of the transition from an orally focused tradition to a written one. It also meant that, for the first time, Māori changed from relying on memory and the oral transmission of knowledge as this information started being recorded in writing.

Māori adopted reading and writing with enthusiasm, and it came as no surprise that Christian concepts and beliefs became integrated with Māori values, leading to changes in religious and philosophical traditions, and the conversion to a new religious faith. However, some Māori religious groups like the Pai Marire and Hauhau were more enamoured with the Old Testament teachings of “an eye for an eye”. Comparisons were also made between themselves and the Jews, in that their land was unjustly being taken by settlers and, through divine intervention from Jehovah, the settlers would be forced into the sea and the land restored to their ownership.

The influence of Christianity remains very evident to this day, with much of the ritual associated with formal ceremony including karakia (prayer), whaikorero (speeches) and himene (hymns) peppered with references to Christian concepts. Māori have strong religious affiliations with mainstream Christian churches (Anglican, Presbyterian, Catholic, Latter Day Saints) and Māori movements (Ratana, and Ringatu).

In conclusion, the introduction and use of literacy to record myths, traditions and other forms of Māori information resulted in a transition from relying on the use of oral memory, to the use of print sources in the form of monographs, manuscripts, diaries and other archival material. This transition provided new means of accessing knowledge that hitherto had only been available in oral and artistic forms. The analysis of these traditions by Europeans led to new theories of where the Māori

originated from and when. Christianity has had a major impact on Māori belief systems, with this being most evident in the tikanga undertaken on formal and informal occasions.

Environmental and astronomical information indicators

The relationship between Māori and the environment remains important to this day. The increased emphasis on sustainability and concerns about climate change in the modern world have led to a requirement for environmental literacy that encompasses holistic perspectives not dissimilar to those held by Māori. These perspectives acknowledge the relationship between human kind and land, water, air, and forests. Although there is, in some quarters, scepticism about 'Māori knowledge and science', Crown Research Institutes such as Landcare Research and the National Institute of Water and Atmospheric Research (NIWA) are incorporating Māori values into their practices. This, in a sense, brings Māori knowledge together with Western scientific practices into what Durie (2005:140) has labelled the cultural interface, defined as the place where science and indigenous knowledge meet. Within this interface, the insights and methods gained from one knowledge system can be used by the researcher to enhance the other, and can provide opportunities to expand the levels of knowledge and understanding in both knowledge systems.

In this context, the knowledge that Māori have of the environment can assist in the understanding that Western science has of the effect that phenomena such as climate change have had on the environment. Māori forms of sustainable management of eco-systems, forests, wetlands, rivers and freshwater resources are part of the body of knowledge encapsulated within mātauranga Māori (Māori knowledge systems). Whānau, hapu and iwi organisations are motivated to restore the mana of their natural resources which have become contaminated

through exposure to pests, pollutants and algal life forms, and this has led to a renewed interest in traditional knowledge practices. The major scientific funding agencies, Foundation of Research, Science and Technology (FoRST) and the Royal Society's Marsden Research Fund, allocate research funding to projects that involve mātauranga Māori, with many of these being collaborative applications from Māori and mainstream organisations such as universities and Crown Research Institutions.

The last fifteen years has also seen the rejuvenation of interest in Māori astronomical knowledge. This has been demonstrated through successful re-enactments of voyages between New Zealand and Rarotonga by Hector Busby in *Te Aurere*, using traditional navigational aids including star patterns and the flight of migratory birds. The interest has also been linked with the renaissance in Māori festivals, particularly Matariki (Pleiades) and Puanga (Riegel), being celebrated on an annual basis.

The adoption of the maramataka (Māori calendar) was promoted by Te Taura Whiri o te reo Māori (Māori Language Commission) in 1990, using the terms that Elsdon Best recorded from the Tuhoë elder Tutakangahau; however, rather than using the concept of lunar months, these were adapted to calendar months. Research by Roberts et.al (2006) unveiled 44 different maramataka, which with the exception of two were all part of the published record.

This interest has extended to projects involving horticultural customs following traditional Māori planting and harvesting practices using lunar cycles. An example of this is the highly successful taewa (Māori potato) project initiated at Massey University, involving a Māori collective of

growers that planted 25 different species of taewa using traditional methods, including following the cycles in the lunar calendar⁸.

Renewed interest in the mātauranga Māori contained within the maramataka has also been shown by those with interests in fishing and eeling.

In conclusion, traditional Māori knowledge of the natural world provides a form of environmental literacy that assists in indicating, forecasting and explaining the variations that can occur in New Zealand's seasons.

The information of language

The re-discovery of New Zealand by Western explorers, Tasman in 1642 and Cook in 1769, saw the beginnings of the change in the application of language to the prominent features of New Zealand's geographic features. Abel Tasman's brief visit saw him name New Zealand as Staten Landt and what is now known as Golden Bay, Murderers Bay. Cook, in 1769, carried on this tradition by providing English names to geographic features and regions. Prime examples of this are the naming of Cape Egmont and Mount Egmont after the 2nd Earl of Egmont who had been a sponsor of his voyage, and various bays after his own experiences of those places, including Poverty Bay (so named for its lack of resources), Bay of Plenty (named for resources being abundant) and Bay of Islands (for the many islands in one geographic area). Although Māori had already assigned names to these locations, the names assigned by Cook and other explorers became the accepted names because they registered their allocation on the charts and maps they constructed in the course of their journeys of discovery. Similar processes took place as settlers developed towns and villages, with the

⁸ <http://www.tahuriwhenua.org.nz/documents/hekaikēiakuringaringa.pdf>

Māori name for those places being ignored or discarded in favour of names from England or after historic heroes, for example Ngamotu became New Plymouth (named after Plymouth, England), Papaioea became Palmerston North (after Lord Palmerston, a former English Prime Minister), Whakatu became Nelson (named after Admiral Lord Horatio Nelson) and Whanganui became Petre (named after Baron Petre, one of the Directors of the New Zealand Company).

The discarding of Māori names not only saw the loss of a name but the loss of the history behind the name. It is only over the last 25 years that the Waitangi Tribunal and New Zealand Geographic Names Board (GNB) have started recommending the restoration of Māori place names, either as a response to Treaty claims or by petition to the Board. As part of the Treaty settlement process, the GNB advise the Office of Treaty Settlements on issues relating to the names. The restoration of Māori names is not without controversy; high profile examples of this include allowing Taranaki iwi to restore the name of Taranaki to Mount Egmont, whether Whanganui should be spelt with or without an 'H' and the change of Mount Parahaki in Whangarei to its proper name of Parihaka.

Other projects undertaken by the GNB have sought to restore information about Māori place names and, when appropriate, reclaim these names. These projects have included collaboration with the Historical Publications Section of the Department of Internal Affairs, which has resulted in publishing of *Ngā Tohu Pumahara* (1990), *the Bateman New Zealand Historical Atlas* (1997) and relief maps of New Zealand and the Chatham Islands at 1840, including original place names. Furthermore, the GNB has also put protocols in place for considering Māori place names, including consultation with the appropriate hapu and iwi, particularly where misspelt place names may have become entrenched over the passage of time.

In conclusion, it can be seen that the reinstatement of Māori place names is not only restoring the mana of those names but returning the history and traditions of those names and the places they relate to. As such, these developments are part of the renaissance and revitalisation of te reo Māori and the reclamation of mana for these places by hapu and iwi. This has been enhanced further through the use of Geographical Information Systems (GIS) techniques to map these physical features along with their historical names.

Artistic information indicators

The symbolism found within the Māori arts continues to provide a sense of identity within the modern era. This is particularly true of whakairo (carving), which is highly focused on the depiction of tupuna (ancestors) important to the marae, either through direct descent or through traditional lineages. Although there was a period during the 20th century where few master carvers were available to oversee projects, the development of whare tipuna (ancestral meeting houses) has continued to be an important element to any whānau, hapu or iwi building or redeveloping their marae. Knowledge of significant events in their history and key ancestral figures provides important information to the carver, who will use this to ensure that their carvings are representative of these. Therefore, like many other areas of Māori information, knowledge of whakapapa is integral to ensuring that the art form accurately represents the significance of these ancestral figures to the people of the marae.

Interest in whakairo was revived in the late 1920s through the development of the Rotorua Carving School, the patronage of Sir Apirana Ngata and Princess Te Puea Herangi and in the later part of the twentieth century with its installation as a taught subject at whare wananga (institutions of higher learning) at the tertiary education level.

The teaching of contemporary Māori visual arts adds another dimension as it incorporates matauranga Māori into sub-disciplines such as painting, photography and computer generated design.

Ta moko (facial tattooing) has also undergone a renaissance with increased numbers of men sporting full facial and body tattoos and more women opting for moko. This has also seen an increased number of ta moko artists emerge, offering traditional patterns albeit using modern technology rather than the chisels that were used in traditional times.

The additional attention received by whakairo and moko has also been reflected in international circles. Although Māori carving and mokomokai (tattooed heads) had always been a source of fascination internationally and highly collectible by museums, galleries and private collectors, this has become even more apparent over the last 25 years through the international acclaim received by the Te Māori exhibition in the mid 1980s, and the development of the internet which has made the sharing of information easier. Various authors (Mead, 1994; Shand, 2002; Jahnke & Tomlins-Jahnke, 2003; Solomon, 2004) have written about Māori concerns regarding the infringement of cultural and intellectual property rights, whereby Māori designs and patterns are used by others in a culturally inappropriate manner.

The forms of music that come together under the umbrella term of moteatea (sung poetry) were collected by Sir Apirana Ngata and Pei Te Hurinui-Jones in the 1920s and 1930s, and were published as a four volume set entitled *Ngā Moteatea* in 1959. These waiata are recognised as a rich source of tribal history, as they recount key individuals and events in the history of the peoples they belong to. These publications have become even more valuable in recent years by their republication and the fact that, for the first time, recorded versions of many of the items are publicly available on compact discs that are supplied with the

books. The lyrics of these items provide an abundance of information that has been used as vital evidence in the Māori Land Court, The Waitangi Tribunal and in direct negotiations with the Office of Treaty Settlements. They are used for establishing relationships with a parcel of land or other landscape features, confirming key events in the history of a tribe or representing whakapapa and other relationships between one group of people and others.

In conclusion, the range of artistic information indicators have been influential in the revitalisation of Māori knowledge that are contained within these art forms and serve as reminders of iconic events in the history of whanau, hapu and iwi.

Assimilation, integration and urbanisation

The policies of assimilation and integration, when coupled with urbanisation of Māori in the post-war period, have had a profound impact on the access that many Māori have to knowledge that would assist them in the process of being able to accurately name key identity indicators. The shift to the cities in the 1950s and 60s and the subsequent loss of connections with their tribal roots has led to loss of critical information about their whakapapa, marae, history of their hapu and iwi. This is best illustrated by statistics from the 2006 Census (Statistics NZ, 2007) which reveal that 102,366, or just fewer than 16 percent of those that identify as Māori, do not know what iwi they belong to. The impact of this is only realised when this figure is compared to the iwi affiliations that have been stated. The group with no iwi are second in size, only beaten by Ngapuhi who have 122,211 members. These Māori are effectively culturally disenfranchised, as they don't know their whakapapa. Māori who have no knowledge of their hapu or iwi, are unable to participate in the affairs of these groups or to enjoy the fruits of successfully negotiated treaty settlements. For Māori in major cities that

have urban Māori organisations, those without iwi affiliations can identify themselves with the urban authority.

As whakapapa is inextricably linked with mana, those that have little or no knowledge of their whakapapa have diminished mana, and although mana can be earned through significant deeds (mana tangata), in a Māori context Mead (2003:29) states that mana is reserved for “those in leadership roles in the community” and of major importance to this status is the need to “be well placed in terms of whakapapa”, with people of mana drawing their “prestige and power from their ancestors (mana tipuna)”.

The Māori renaissance has coincided with the Treaty settlement period and this has been a driving force behind attempts by Māori to reconnect with their turangawaewae (place to stand). Tuhono is a service that attempts to reconnect Māori with their iwi, by providing information to iwi about Māori that have registered on their database. Most iwi have also established registers of iwi members that have allowed them to build whakapapa resources, whereby they can track an individual's eligibility for registration as a member, thus in the process helping an individual to re-establish their whakapapa.

A key component of the Māori renaissance has been the revitalisation of te reo Māori. A report prepared by Te Puni Kokiri (2008) which focused on three key areas, language status, language knowledge and acquisition, and language use, shows that there are clear gains in the level of Māori language proficiency, with greater status being given to the language by Māori and non-Māori. More Māori are learning te reo, and te reo is being used in the home which makes a major contribution to the inter-generational transmission of language between adults and children.

Increased language learning is seeing a corresponding need for Māori language materials for teaching, recreational, information and knowledge purposes. Unfortunately, although there are some excellent initiatives occurring at the children and young-adult levels of literature, there is still a drastic shortage of quality materials aimed at the adult and sophisticated reader levels. This is most probably due to the a lack of authors able to write in te reo Māori and the limited market for te reo Māori publications, making it less attractive for publishers to take the risk of publishing them. However, one of the benefits of the revitalisation of te reo Māori has been the development of Māori television channels and iwi radio networks, which has provided positive reinforcement for te reo Māori speakers and those attempting to improve their language skills.

From a library perspective, the revitalisation has led to increased interest in the manuscripts, diaries, letters and other archival materials written in te reo Māori and deposited in libraries, archival institutions and museums. Employment of information professionals with te reo Māori skills has made these materials accessible through cataloguing, arrangement and description, and in some instances translation and digitisation. An example of the latter is the Sir Donald McLean collection recently made available online⁹ by the Alexander Turnbull Library. The letters, written in te reo, are progressively being translated by a team of scholars.

The introduction of Library of Congress endorsed Māori subject headings over the past five years means that for the first time speakers of te reo Māori have intellectual access to library materials in their language. Many libraries have taken intellectual access one step further by providing their library catalogues with a Māori language interface, which provides menus, instructions and help information in te reo. Unfortunately, the information retrieved is predominantly in English and

⁹ <http://mp.natlib.govt.nz/static/introduction-mclean?!=en>

this is unlikely to change until cataloguing records are transcribed into te reo. Such a project is beyond the current capacity of New Zealand's library and information profession and this is indicative that, although the language is healthier than it has been over the past century, it has not reached the point where it has become fully entrenched.

In conclusion, it can be seen that urbanisation of Māori and subsequent attempts by governments to assimilate and integrate them into mainstream society has failed to suppress the desire of urban Māori to have a strong sense of Māori identity. As a consequence, Māori have re-established a presence in the cities based on traditional principles. As part of this rebirth, there has been increased interest in rediscovering tribal links and whakapapa for those that are able to trace them. For those that are unable to, new structures have been created including urban Māori movements and marae (meeting place), which have created a momentum for the learning of te reo Māori and traditional forms of artistry.

The digital age

The introduction of photography in the 19th century was another phase in the gradual exposure of Māori to a curious world. Although these images were predominantly developed for commercial purposes, they have provided a lasting documentary archive of Māori life and customs at that time. A substantial number of these photographs have been deposited in public collections at libraries, archives and museums, and made available to their clients. With the advent of web based technology, these institutions have focused on making their pictorial collections available on their own websites or sites that are collaborative efforts between several institutions. An example of the latter is Matapihi¹⁰, which is a National Digital Forum initiative. Matapihi has

¹⁰ www.matapihi.org.nz

contributions from seventeen different libraries, archives, art galleries and museums, with approximately 1500 of these images having a Māori focus. These images will be available to any person with an internet connection. Photos and images uploaded by these institutions will be copyrighted to those institutions. However the 1500 images are just the tip of a very large iceberg, with a Google Image search using the word 'Māori' resulting in the retrieval of 3,700,000¹¹ records. This is indicative of the reach of the internet and the ease of making images available on websites and web 2.0 image sites like Picasa¹² and Flickr¹³. There is very little that Māori can do to control the use and spread of these images across the internet, other than to communicate whenever possible with the individuals and organisations that may use the images in a culturally inappropriate manner.

Another concern for Māori is the issue surrounding the storage of these items, as the institutions involved in the digitisation process are attempting to future proof the images by archiving them in a manner that will allow them to continue to be able to be displayed in new technologies. This essentially reduces the data involved in the digitisation into binary code, which will turn the images into a series of the numerals 0 and 1. At an international indigenous librarians forum¹⁴ in February 2009, there was concern expressed about the mana of the tupuna (ancestors) depicted in photos being compromised by the digitisation process and it was decided that this issue would be raised with the Board of the National Digital Forum.

¹¹ Search conducted 30 August 2009

¹² www.picasa.google.com

¹³ www.flickr.com

¹⁴ 6th International Indigenous Librarians Forum, 1-4 February 2009, Otaki, New Zealand
<http://www.trw.org.nz/iilf2009.php>

The New Zealand Film Archive¹⁵ is responsible for collecting and preserving New Zealand's cinematic history and has within its collections Māori moving images dating from 1901. The Film Archive also has a policy of making these materials publicly accessible and has seven video libraries located in art galleries, libraries and museums throughout New Zealand. In 2009 the Film Archive began transferring these films to a digital library. However, unlike other digital libraries such as Matapihi, the Film Archive will not be making the digital library widely available via the internet. The Archive does have a commercial arm that makes footage available for a fee, but this is at their discretion and their policy states that where necessary they will need to seek clearance from hapu or iwi

The development of the internet has led to a proliferation of information about Māori being made available. A keyword search on Google for the term Māori returned approximately 16,700,000 hits¹⁶. Much of this information has been created by Māori themselves, either through a website created by an individual, hapu, iwi, marae or another organisation, but many of the sites with information about Māori will have been created by individuals and organisations with little or no knowledge of Māori culture and customs. Any information placed on the internet is considered to be in the public domain and therefore available to anyone. Information such as whakapapa that once might have been considered tapu and not to be shared openly loses its status once it is in the public domain. Sometimes this information is made available by a well-meaning member of the whānau or hapu who may not have thought through the consequences of their actions. However, information on whakapapa or historical issues to do with a hapu or iwi is sometimes published by a non-member, who may have obtained the information from a public source such as the Māori Land Court minutes and published it to the web. Unfortunately, once it has been placed in the public domain it is not possible for it to be retracted. The same is true of

¹⁵ www.filmarchive.org.nz

¹⁶ Google search was conducted on 30 August 2009

information that is not accurate or has not been interpreted in the same way that the 'owners' of the knowledge would have presented it. This places the burden of making sense of the information on the person who has retrieved it from the internet and relies on their ability to evaluate the authenticity of the information. Unfortunately, not all internet users have the necessary information literacy skills to be able to make discerning judgements about the provenance of the information they are accessing, and as a result some Māori information will continue to be misrepresented.

The introduction of digital technology has provided opportunities for items that were previously considered to be rare or hard to obtain to be made available in a full text format. In New Zealand the two main digitisation agencies are the New Zealand Electronic Text Centre¹⁷ and the University of Auckland's Early New Zealand Books¹⁸ project. Both agencies have made digital images and the full text of books available via their respective websites. Most of these items are about Māori rather than by Māori, so are more focused on the authors' perceptions and observations. Although some of these sources provide valuable eyewitness accounts, including describing tikanga Māori practices, they need to be seen in the context of the time and worldviews of the authors that wrote them.

As discussed in the chapter on information barriers, the nature of the 'digital divide' in New Zealand means that a high proportion of Māori are unable to access the internet and the information that it holds. This is further exacerbated by the fact that Māori are not high users of libraries where they can, in most cases, access the internet without or at very low charge. For those who are without access this will mean that, in the 21st century, Māori information and information about Māori has made the

¹⁷ www.nzetc.org

¹⁸ www.enzb.auckland.ac.nz

transition to a digital world, but those who may best benefit from this information have not managed to make the same shift.

Conclusion

The relationship between Māori, information sources and knowledge systems has undergone radical changes over the period since first settlement of New Zealand. In the 21st century, although traditional methods of information transmission are still obvious at marae and other culturally specific situations¹⁹, literacy has proven to be highly influential on the storage and dissemination of Māori information and knowledge over the last 195 years since formal education was introduced to Māori.

The fruits of literacy are available in the nation's libraries, archives and museums in the form of books, journals, manuscripts, diaries and whakapapa books. The accuracy of the information in these sources has been questioned, as in many cases the authors of these works had been unduly influenced by exposure to Western values and beliefs. The misguided scholarship of late 19th and early 20th century ethnologists and historians led to the development of a distorted view of Māori origins and religious beliefs. Although the limited nature of the scholarship behind these views has been exposed by authors such as Sorrenson (1990) and Simmons (1976), the idea that Māori migrated as a great fleet of seven canoes and were preceded by Moriori still exists as a romantic notion in some quarters, and as a justification for not acknowledging Māori rights by others.

The revitalisation of te reo Māori since the latter part of the 20th century has seen a renewed need for the publication and production of resources for educational, recreational and information purposes. This has led to

¹⁹ These situations would include powhiri at non-marae premises, tangihanga held in peoples homes and hui in public facilities

the establishment of Māori television channels, iwi focused radio stations, and increased Māori language programming on mainstream television channels and radio stations. The renaissance of interest in te reo Māori has also been recognised by statutory bodies such as the GNB which has the responsibility for considering and allocating name changes for geographic features. In recent years the revival of Māori placenames has received increased attention through the Treaty of Waitangi settlements process, and the restoration of these names has assisted in the revival of the mātauranga Māori associated with the names.

The renaissance of traditional Māori creative arts in the form of whakairo, tukutuku, ta moko and the innovation brought by contemporary arts of painting, sculpture and photography has led to increased interest from artists in researching and reflecting the relevance of the history and symbolism of the story that is reproduced in their artwork, thus presenting another format for understanding traditional knowledge.

The ongoing influence of Christianity on Māori knowledge and belief systems has in some quarters been transformational, with Christian symbols and rituals being incorporated into the application of tikanga Māori. In more recent times there have been attempts by others to bring their religious practices back into what they believe to be a traditional framework, by rejecting Christian influences and acknowledging atua Māori rather than Western religious figures in their karakia.

The introduction of the internet and digital technology has led to the mass propagation and interest in Māori information and knowledge worldwide. This development means that Māori have virtually no control over how this information is stored or used, and this has led to it being misused or used in culturally inappropriate ways.

The introduction of the internet has also been a positive development in that it has made a major contribution to reuniting Māori with their tribal groups. Iwi and hapu societies use websites as an information channel to allow urban members to trace their whakapapa and re-establish ties. This, again, is indicative of the change that Māori society has undergone, in that the very information that these urban Māori require would in traditional times have been closely guarded and not readily available to all who sought it.

In conclusion, this chapter has described how the information world that Māori youth of the 21st century occupy is radically different to that experienced by their ancestors. The two key differences lie in the range of sophisticated technological tools that are available to be used in seeking, sharing and exchanging information, and secondly, the contrast that exists in terms of access to information. In pre-European times, hierarchy and elitism determined who was able to access information, whereas in the contemporary world information is now more easily accessible to all those that seek it, with this being best represented by the range of technological tools available for the transmission of knowledge. However, in terms of the type of information that is required to legitimise themselves in a Māori context, there has been little change, apart from the fact that prior to urbanisation and assimilation almost all Māori were aware of their links to their hapu, iwi and turangawaewae. As the 2006 Census statistics demonstrate, this is no longer the case. However in the same way that Māori have adopted new technologies, urban Māori have created new structures in the form of urban Māori authorities, which provide opportunities for Māori to develop a new sense of turangawaewae and to participate in cultural situations that encourage the inter-generational transmission of knowledge. These developments have provided urbanised Māori students and their whānau with a framework for making sense of their world.

Chapter Three moves on to look at the theoretical basis of information seeking literature, with a specific focus on the key theorists that have influenced this research project. The chapter also highlights the paucity of literature available on Māori information seeking behaviours and use of libraries and other Western information repositories.

Chapter Three

Information seeking and Māori: a literature review

Chapters' One and Two described how the Māori information world has been affected through exposure to new technologies, Western educational ideology and religion, and change from urbanisation. This chapter moves on to look at the theoretical context for the project, commencing with an examination of definitions of information seeking. The chapter also assesses the appropriateness of leading models in the literature for a study of Māori information seeking behaviour and identifies the importance of culturally focused models, especially Fisher's information grounds theory, to this study. The current literature on Māori engagement with libraries and information barriers encountered is also discussed, providing readers with an understanding of what is already known about Māori information behaviour.

Information seeking literature

Information seeking can be defined as a complex activity involving interaction with a diverse range of information structures, systems and resources. Individuals and organisations seek information to inform everyday life activities, decision-making processes and problems, including personal, financial, career-related, health and social issues.

Comment [PA11]: This is my own definition, which is why I used the phrase "can be defined" rather than "is defined".

Information seeking has been a subject of research activity since the 1950s. The early studies were focused primarily on the information behaviours of those engaged in academic and research activities, such as scientists. The information seeking activities of the general population have only come under scrutiny over the last two decades.

Various definitions of information seeking and information behaviour exist in the literature. Case (2002:5) defines information seeking as "a

conscious effort to acquire information in response to a need or gap in your knowledge". His definition for information behaviour states that it "encompasses information seeking as well as the totality of other unintentional or passive behaviours (such as glimpsing or encountering information), as well as purposive behaviours that do not involve seeking, such as actively avoiding information". In a sense this definition does not go far enough because in addition to actively avoiding information, one could add other purposive behaviours such as actively withholding information.

Another theorist, Gary Marchionini (1995:5-6), produced a major work on information seeking in electronic environments in which he identified information seeking behaviour as "a fundamental human process closely related to learning and problem solving" and "a process in which humans purposefully engage in order to change their state of knowledge", as well as a "natural and necessary mechanism of human existence". Marchionini (p. 9) suggests that a human information seeking framework is analogous to a computer program in that it contains a set of interrelated factors (data structures) and a network of processes (procedures) that depends on interactions between several factors including the information seeker, tasks, search systems, domain, setting, and search outcomes.

The literature on information seeking and information is vast, with Case (2007) estimating that there have been over 2000 items written on the subject in the previous ten years. Despite the vastness of the literature there have been very few items written about indigenous peoples' information seeking and information behaviour. Most of this literature has been centred on mainstream populations (Europeans / Caucasians), with the literature on minority populations being sourced from the United States of America and centred on African-Americans, Hispanic / Latinos and Asian Americans. In the United States, Canada, Australia and New Zealand, the information seeking behaviour of Native Americans, First Nations, Aboriginal and Torres Strait Islanders and Māori has been

largely ignored. This lack of attention is not surprising as the indigenous populations in these countries are proportionally quite small; Māori is the only population amongst these that accounts for more than ten percent of the overall population of their country, with the other indigenous populations accounting for one to three²⁰ percentage points in their respective countries. The other factor that impacts on the lack of research on these populations is that they are drastically under-represented in the library and information professions of these countries, and even more so in the academic and research faculties of the library and information schools. This low level of representation translates to a low level of interest in indigenous populations by researchers and academics in this discipline.

As Case has already indicated, there is a large body of literature on information seeking and behaviour. Amongst the books, articles and presented conference papers are a multitude of models representing the theories about how people seek information and the barriers they encounter in the process. Some of the better known models have been developed by Wilson (1981, 1999), Krikelas (1983), Dervin (1992), Ellis (1989) and Kuhlthau (1991). Although these models have been used across different countries and applied to multicultural situations, they have generally not been applied to research involving indigenous peoples. Without wanting to pre-judge whether these models would be representative of indigenous peoples' information seeking and behaviour or not, it is pertinent to point out that they have been developed with non-indigenous research participants and organisations in a Western focused ideological research tradition. This tradition is identified by Smith (1999) as having been developed from the standpoint of intellectual and cultural superiority in relation to indigenous communities, having been the product of colonisation and the associated introduction of literacy, Christianity and western forms of education. This 'natural' superiority ignores traditional knowledge and indigenous ways of knowing and

²⁰ Estimates place indigenous Australians at 2.5 percent,

assumes that the models developed in a Western knowledge paradigm would apply and explain the actions of all peoples. In all fairness to the creators of these models, this may have not been their intention as they largely operate in research environments that have no or little indigenous input, and it may not have occurred to them that there might be a difference.

Studies by Savolainen (1995), Chatman (1999), Fisher (2000), although also lacking in indigenous applications, do provide frameworks for considering how cultural differences in information seeking and sharing environments can be taken into account. Chatman's "life in the round study" (1999) and "information poverty" (1996) and Fisher's (2004) study of Hispanic immigrant farmers all involved extensive research of minority and at risk populations. Chatman's (1990, 1991) studies of janitors, prisoners and retired women (1992) involved the consideration of how culture, social norms and the role played by key individuals resulted in the development of information environments firmly entrenched in the worldview shared by those in these situations. Chatman's description of these as a "small world" indicated that there was a high degree of dependence between the members for information flow and interaction.

Fisher's theory of information grounds is based on research conducted in foot clinics (Pettigrew²¹, 1998) and involves situations and places where people may gather for one purpose and end up sharing and exchanging information while they are there. Since its development, the information grounds theory has been applied to immigrants in New York (Fisher, 2004a) and the Pacific Northwest (Fisher, 2004b), as well as other social groups and situations (Fisher 2005) which include public facilities such as hair salons, airports, sports fields, classrooms and churches.

Fisher's information grounds theory has been heavily influenced by social networking theory, particularly the writings of Granovetter (1973,

²¹ Karen Fisher nee Pettigrew

1983) on the strength of weak ties. Granovetter was deeply influenced by the studies by Rapoport (1954) and Rapoport and Horvath (1961). Rapoport (1954:75) commented on the “well known fact that the likely contacts of two individuals who are closely acquainted tend to be more overlapping than those of two arbitrarily selected individuals”. Rapoport and Horvath’s (1961: 290) hypothesis was based on the expectation that “the friendship relations and therefore the overlap basis of the acquaintance circles tend to become less tight with increasing numerical rank-order (i-e. best friend, second-best, third-best, etc.)”. Granovetter’s studies concluded that individuals and social groups received information from both strong ties (individuals that are well known to them) and weak ties (individuals that are not well known), however the information received from weak ties is of a richer vein as it is sourced from outside the social network’s normal information sources.

Johnson’s (2004) study of the social networks of urban residents in Mongolia found that, when it came to choosing from organisations, friends, acquaintances or media sources for their information, they tended to deliberately choose individuals who were not well known to them and whom they considered to have better access to information resources. This study reinforced the weak ties theory promulgated by Granovetter (1973, 1982).

Like Chatman’s studies, Fisher’s information grounds theory takes into account the social and cultural status of the individuals gathered, thus normalising the information behavioural practices. Those who are gathered set the tone for the interactions that take place at the information ground, with Fisher’s theory effectively establishing that these can occur at any time or place. It therefore is inclusive of indigenous places and peoples as this thesis demonstrates through its explorations of the information grounds that Māori students participate in at school, marae and social situations.

Chatman's and Fisher's studies and theories are viewed by Savolainen (2009) as being based in the context of everyday life information seeking. Savolainen (1995:266-267) describes his Everyday life Information Seeking (ELIS) model as the "acquisition of various informational (cognitive and expressive) elements which people employ to orient themselves in daily life or to solve problems not directly associated with the performance of occupational tasks". Daily life in this context can cover everything from domestic and household issues, financial problems or questions, and personal health information seeking. Although occupational information needs are not normally included, Savolainen does concede that it is not normally possible to easily separate work from everyday life.

The ELIS model has been utilised by a number of information seeking researchers in a variety of contexts, demonstrating its adaptability. Studies have been undertaken involving a range of different ethnic and social groups including young adults (Agosto and Hughes-Hassell, 2006), African-American households (Spink and Cole, 2001) and Korean graduate students (Jeong, 2004). However, like the other major models created by Wilson (1981, 1999), Krikelas (1983), Dervin (1992), Ellis (1989) and Kuhlthau (1991), ELIS has not been applied to indigenous populations.

Savolainen (2009), in reviewing the role of social factors in Fisher's and Chatman's studies, concludes that these factors are normative constraints in Chatman's concept of the small world, as the presence of people outside the normal group is viewed with suspicion by the social network. However, unknown individuals are at times absolutely necessary to the success of information grounds, as the co-presence of other individuals is essential to seeking and sharing of information regardless of whether these opportunities are planned or serendipitous.

For Māori these networks are often defined on whakapapa (genealogy) principles via the whānau (extended family), hapu (sub-tribe) or iwi (tribe)

units. The whānau is identified in the writings of Best (1924), Buck (1949), Firth (1959), Metge (1983) as being the most cohesive unit, with an acceptance that several generations of the one family would live together and would collaborate to ensure that the whānau would succeed socially and economically. Firth (1959:111) describes how members of the whānau would undertake individualistic pursuits together, such as gardening, harvesting and eeling.

Like Dervin's (1992) sense-making metaphor, the everyday life information seeking approach can cross many boundaries, but for Māori who have to draw on more than just one knowledge framework, defining everyday life is difficult. The transition and differentiation between the Māori and Western knowledge paradigms is not always transparent and is quite possibly very different for each individual, as the level of competency in each will vary and thus cause confusion in the mind of the seeker, who may be in a cultural situation that is outside their comfort zone. This would be exacerbated through the expectations of other participants, who may assume they share the same values and / or knowledge.

The value of social networks to information behaviour studies is examined by Schultz-Jones (2008). In her study she distinguishes between social network theory and social network analysis; the theory is designed to explain the workings of networks while the analysis is the methodology used to research the network behaviours. In her analysis of information science literature published from 1996 onwards, she identified that there had been an increased interest in social network theory and analysis research, and that this demonstrated a movement from research that has its

primary emphasis on understanding the structure of networks to understanding the information environment within which networks reside and the information environment that is created by network structure and function (pg. 611).

Schultz-Jones believes that the use of social network analysis and theory in information behaviour studies will lead to new discoveries and the development of additional concepts of social network theory. It is the aim of this current study to advance knowledge with regard to Māori social networks as an example of indigenous social network theory.

Māori networks

The key social groups in Māori society are whānau, hapu and iwi, and as such they lay the foundation for the development of Māori social networks. In traditional terms they are formed on the basis of whakapapa links between the members.

Whānau is defined by Durie (1997:1) as a “diffuse unit based on a common whakapapa and within which certain responsibilities and obligations are maintained’. Durie also notes that, over the past two decades, Māori with similar interests may have formed a cohesive group which becomes an interest based whānau, which Metge (1995:305) labelled a kaupapa whānau. She notes that whānau based on these terms “place particular stress on the other characteristic feature of the whakapapa based whānau, whānau values and the ways of working derived from them”. As a network, the whānau cares and provides support for members, shares resources, and provides a platform for the transmission of information and knowledge within the whānau and with other organisations.

Cunningham (2005) notes that the degree of whānau connectedness is related to the scale of cultural identity on the part of individuals, with those who have a positive view of their culture having a greater level of contact with their whānau. This connection sometimes runs to more than one whānau, with individuals belonging to more than one operational whānau moving seamlessly from whakapapa whānau to

kaupapa whānau with the possibility that these have overlapping membership.

As both whakapapa and kaupapa whānau are effectively social networks, this project proves that the values that members of these groups share are important indicators of the manner in which information is exchanged. The basis of these values is tikanga Māori.

Tikanga Māori (Māori cultural customs) is defined by Mead (2003) as a form of social control. He identifies it as the public face of Māori knowledge and recognises its role in controlling interpersonal relationships, ways that groups meet and interact, and how individuals identify themselves.

Mead defines the knowledge base of tikanga as being derived from shared ideas and beliefs, the application of these beliefs to human interactions, ritualistic and ceremonial excellence, expectations of how participants will act and a desire to ensure that tikanga is passed on from one generation to the next.

Integral to the effective operation of whānau are shared values which establish the basis of the relationship between whānau members. The nature of these values has been described by a number of authors, with an inevitable overlap in some of the values but a difference in the way they are applied.

Rangihau (1981:166) states that

kinship is the warmth of being together as a family group: what you can draw from being together and the strength of using all the resources of family. And a strong feeling of kinship or whanaungātanga reaches out to others in hospitality.

In a health context, Durie (1997:10-12) describes the values as being manaakitia (the capacity to care), tohatohatia (the capacity to share), pupuri taonga (the capacity for guardianship), whakamana (the capacity to empower), whakatakoto tikanga (the capacity to plan ahead).

Metge (1995:80-102), in a major work on whānau, identifies a set of values which are used to govern relations within the whānau and with outsiders. She makes the point that whānau that are not based on descent lines are in fact making a commitment to adhere to the same values. Metge identifies these values as aroha (love / generosity), whanaungātanga (kinship), taha wairua (spirituality), taha tinana (physical health), ora (energised life), tikanga (right way), mana (spiritual power and authority), mahi a ngākau (duty), utu (reciprocity) and kotahitanga (unity). She stresses that most of the terms used to describe these values have more than one meaning and that this can lead to the values being interpreted in different ways. An example of this is mana. Metge (1995:87-88) notes that the usual translations of mana as prestige or authority are secondary to the translation of spiritual power and authority; this authority she describes as being derived from different sources, these being tupuna (ancestors), spiritual contact with atua Māori (Māori gods), mana tangata (self-achievement), and mana tane, and mana wahine (mana of the genders). Metge labels these values as ideals, noting that, in trying to live up to these ideals, whānau will at times succeed and at other times fail, but when used wisely they increase the solidarity of the whānau and assist it to meet its aims. However, she fails to explain how those kaupapa whānau that don't have any members who also belong to whakapapa whānau learn these values.

The other two key kinship-based networks are hapu and iwi. Unlike whānau, these are not typically kaupapa based. Hapu are defined by Mead (2003:214-215) as consisting of whānau that are bound by strong kinship ties and by the whakapapa principle, and are part or a section of an iwi (tribe). The hapu provides a cohesive structure within which the

various whānau units that belong to it can work co-operatively, including the sharing and exchanging information for the social and economic well being of all.

Iwi is the collective name for a group of hapu who are all descended from a shared ancestor. Mead (2003:219) puts iwi into the context of one of its meanings, bones. This he equates with whakapapa and strength, and he links this strength to the principle of whanaungātanga (forming relationships).

The dynamics between whānau (apart from kaupapa whānau), hapu and iwi provide a structured framework for social and cultural interaction, and co-operation between each of the units. Each unit is strong in its own right, with the strength increasing as the hapu and iwi draw together collectively. Mead (2003:220-221) identifies co-operation and alliances between iwi (occasionally hapu) being founded on trade, war allies and seasonal occupation rights requiring negotiation, information exchange and reciprocity. This relationship-building and development of ongoing alliances is representative of social networking on a far grander scale, as it involves large numbers of people, political and social manoeuvring, and often the decisions of a few impacting on the many.

Walker (2004:198) identifies the urban migration of Māori seeking work, money and pleasure in the 1950s, 1960s and 1970s as creating new entities in the form of voluntary associations, and eventually urban marae (meeting places) which became the focal point for fulfilling cultural needs. These groupings effectively became the replacements for hapu and iwi and have developed into their own form of Māori social networks.

The intersection of Māori and European cultures in the cities led to urban Māori attempting to hold on to cultural values and practices while also adopting prevailing Western customs and values. In their approach to resolving issues or problems, both streams of knowledge were available

to be drawn on. Indigenous theorists have named this situation the cultural interface.

The cultural interface

Nakata (2002:7) defines the cultural interface as the “intersection between the Western and indigenous domains”. Within the precincts of the interface he identifies an indigenous person’s challenges as being caused by “the residue of traditional forms and ways of knowing from the pre-contact historical trajectory informing the ways that members of indigenous communities think and act, as do Western ways”. Nakata also believes that those present in the space that constitutes the interface can face confusion due to the “complex interwoven, competing and conflicting discourses that distinguish traditional thoughts and practices from the non-traditional in the day to day”. For Māori and other colonised indigenous peoples this is an actual reality, as in the process of making decisions or seeking information they must identify the context they are in and draw on the knowledge source most appropriate to the situation in question, whether it is indigenous or Western based. However, there are some Māori who are unable to draw satisfactorily on the knowledge of either worldview and will miss out altogether.

Durie (2004:1140) applies the cultural interface to the scientific research context, identifying it as the

location of inventiveness with the insights and methods gained from one knowledge system can be used by the researcher to enhance the other and can provide opportunities to expand the levels of knowledge and understanding in both knowledge systems.

He presents a model that is based on four underlying principles that have implications for the policy and practice of research at the interface. These principles are mutual respect, shared benefits, human dignity and

discovery. Placing these principles into an information seeking context would mean that an information seeker at the interface would be able to draw on both streams of knowledge as a means of making sense of the information seeking task or the problem they are attempting to solve. In applying the interface model it could be seen that an indigenous information seeker's pursuit of information could result in at least three possible scenarios: an information search involving indigenous knowledge sources only; a search involving Western focused knowledge sources; or a search involving elements of both knowledge sources.

Walker (2006:7) presents the two house model developed by Jackson and Poananga (2001) as an example of the two worldviews in action. The Māori house is the domain of whānau, hapu and iwi, with a foundation consisting of land, water, resources and people, under the umbrella of spirituality and tikanga. The non-Māori house is known as the Master's house, which has its foundations in political, economic, legal and social structures. The model is representative of the situation that many Māori experience. They have to balance their lives in the two different houses (worldviews), and these houses have vastly different values. Many work in the Master's house but go home to the Māori house at night, or they live in the Master's house and engage themselves in activities such as kapa haka (performing arts) and waka ama (canoe racing) that are associated with the Māori house.

The library profession

Within the library and information profession in New Zealand the cultural interface has been essentially thought of as biculturalism, with the steady development of this phenomenon occurring over the twenty year period since the late 1980s. The library and information science literature on biculturalism has centred around the *Te Ara Tika* reports (MacDonald, 1993; Szekely, 1997; Simpson, 2005) commissioned by the Library and Information Association of New Zealand Aotearoa (LIANZA) and Te

Rōpū Whakahau, as well as articles in *Library Life*²² and *New Zealand Libraries* (Carroll, 1990; Pharo, 1992; Williams, 1991). Other articles have appeared in national and international journals (Szekely, 1992; McRae, 1992; Mohi and Roberts, 2008; Smith, 2008). The bulk of these articles focused on incorporating a Māori dimension into libraries and the library and information professions rather than identifying Māori information needs or information seeking behaviours.

As stated earlier, the literature on information seeking research involving Māori is relatively non-existent, with no substantive articles or books being available and information seeking being a secondary or minor issue in the literature that has been published.

The major pieces of work that include some reference to Māori information seeking or behaviour are the *Te Ara Tika* studies (MacDonald, 1993; Szekely, 1997; Simpson, 2005) research commissioned by the National Library (Hernon and Chalmers, 1996), and studies by Auckland City Libraries (1994), Szekely (2002) and a report written for the New Zealand Ministry of Consumer Affairs (2002) that focused on how Māori women receive information. Of these studies, only the report for Consumer Affairs was not focused on libraries.

The reports by MacDonald (1993), Szekely (1997) and Simpson (2005) were parts one, two and three of a research project entitled *Te Ara Tika*. Each of the reports focused on Māori interactions and views regarding libraries. MacDonald (1993) focused on the library profession and its views on biculturalism and services to Māori. Rather than survey Māori users on their use of the library, MacDonald spoke to librarians in the public library sector about their perceptions regarding Māori use. The comments from these librarians indicated that they thought Māori used a wide range of library services but mainly for reference or fact-finding purposes rather than recreational purposes, and that there was a heavy

²² Library Life is the professional newsletter of the Library and Information Association of New Zealand Aotearoa. The articles in the newsletter are akin to newspaper columns.

demand for Māori cultural information. Although the research undertaken for this report was groundbreaking and hugely significant for the library profession in New Zealand, the reliance on anecdotal evidence from librarians about Māori information requirements was the prevailing weakness of the study. This, to some degree, was rectified through the commissioning of part two of the project conducted by Chris Szekely.

Szekely's (1997) research was centred on identifying Māori information needs as expressed by Māori that participated in six different hui (meetings) throughout New Zealand. Participants at the hui focused on their experiences of using libraries and the problems they faced in accessing information. The report resulted in thirty-three recommendations for the commissioning associations. The report is valuable for emphasising that Māori information needs are as diverse as any other group's need, incorporating everything from professional career needs to personal needs such as parenting, hobbies, health, etc. The need for Māori cultural information identified in the first part of the project was reinforced by Māori users who participated in the hui for part two.

Simpson's (2005) contribution to the *Te Ara Tika* project was to investigate the approaches used by individuals to identifying Māori information in library collections, with the major focus being on assigning subject headings to Māori information sources.

Although *Te Ara Tika* has made a major contribution to understanding the relationship between Māori and libraries, it has not really made much of a contribution to a wider understanding of information seeking behaviour, as there is no attempt to look at factors and interactions not involving libraries and librarians. *Te Ara Tika* itself points out that Māori are reluctant and low users of libraries but does not investigate what alternative information seeking methods are used instead.

The research undertaken for National Library on the National Depository Scheme is also quite limited in its application. The scheme ensures that official publications which are produced in the machinery of parliamentary practice and by Government Departments are made widely available in public libraries throughout New Zealand. Hernon and Chalmers (1996) discovered major differences in the level of use made of these publications by Māori and non-Māori, finding that Māori are less likely to make use of these items on a day to day basis. Like *Te Ara Tika*, Hernon and Chalmers did not investigate whether Māori accessed this information through alternative sources or methods.

Similarly surveys of Māori users undertaken by Auckland City Libraries (1994, 2002) and Manukau Libraries and Information Services (Szekely, 2002) are informative about the differences between users and non-users of these library systems, including factors relating to age, educational achievement, use of te reo Māori and Māori cultural engagement practices. Szekely (2002:51) highlights the major differences between users and non-users in the Manukau survey; these indicated “that Māori that were younger, better educated and more attuned to their culture were more likely to use libraries”. Non-users of the Manukau Library were characterised as being reluctant due to “uncertainty over the use of technology, poor reading ability, and a disinclination to ask for assistance”. However it cannot be assumed that these individuals are ‘information deficient’ as they may obtain their information through other means and / or have strong information networks, outside the scope of libraries.

The only non-library focused report (Ministry of Consumer Affairs, 2002) gives us a fuller picture of the encounters that Māori women have with information. Although it focused on how Māori women best receive information (specifically consumer information), it strays into other information domains. The research revealed that word of mouth or ‘kanohi ki te kanohi’ (face to face) was the preferred method of obtaining information. The more involved women were in the community, the

easier they found it to obtain information. This information was often obtained from people they trusted such as whānau, friends, partners, colleagues, children and people they knew personally in relevant community or government agencies. The existence of Māori faces amongst the staff in these organisations was emphasised as being important, as they would generally choose to approach them first as they would expect empathy from them.

Information barriers

The Ministry of Consumer Affairs (2002:6) report also focused on information barriers encountered by Māori women. Barriers identified included government agencies perceived as un-friendly to Māori, information overload or information irrelevancy. The latter situation particularly applied to Māori who are impoverished, so that any information provided over and above the basic needs of providing food and shelter for the whānau is unlikely to be appreciated or taken on board. Other barriers identified included having to leave messages, phone message services (e.g. voice mail), unnecessary or indecipherable jargon and a lack of confidence or educational ability to be able to complete a transaction or interaction with an agency. Rural Māori women identified that service and transport deficiencies limited their access to some types of information and, although the internet was identified as a good source of information, these women identified it as another barrier due to issues regarding telecommunications service to remote areas.

The identification of barriers in the Consumer Affairs report introduces another theme that is highly relevant to any discussion involving Māori information seeking behaviours. Like the other aspects of this study, there is little in the way of literature focused solely on Māori information barriers with the exception of the Consumer Affairs report already mentioned, passing mentions in Szekely's (1997) *Te Ara Tika* report, and Lilley (2008) which has been sourced from the results of this thesis.

Internationally the book written by Harris and Dewdney (1994) is heralded as a seminal study of information barriers, although their research was focused on studying the information barriers encountered by battered women in the process of seeking help. Harris and Dewdney's research identifies a range of reasons why barriers may exist in the information seeking process. These reasons include a lack of awareness of what information is required to solve a problem, not knowing where to access the information required, ignorance of the fact that information exists to solve the problem or that the information required just doesn't exist, miscommunication between seekers and providers, and an inability to frame a question that can be understood by others. The article by Lilley (2008) identifies several of these factors as being similar for Māori youth trying to obtain information from formal sources.

Another influential information barriers study is by Julien (1999), who conducted research using an analytical framework that had been developed by Brenda Dervin's early work (1982, 1983, 1993). Julien's framework involves the identification of five categories of information seeking barriers, these being: (a) societal - those which impede the availability of resources necessary to satisfy needs in the social system; (b) institutional – those which arise from an incapacity or unwillingness of an institutional provider to deliver needed information to a certain type of information-seeker; (c) psychological – when an individual is unable to perceive her or his needs as informational in nature, unable to obtain needed information from appropriate providers, or accept (for psychological reasons) the possibility that an information gap can be overcome; (d) physical – such as the absence of physical accessibility for a disabled person and (e) intellectual – when an individual lacks the necessary training or expertise to obtain necessary information.

Julien's research focused on the career aspirations of adolescent Canadians. The results of her study revealed that her research subjects

encountered a wide variety of barriers, including being daunted by the amount of information needed, lack of trust or confidence in the information providers, institutional barriers (lack of resources, unskilled help assistants, attitude of staff) and emotional barriers (lack of confidence in own abilities, fear of asking questions in class, stress and coping with decisions that will have a long term impact on their lives). Similar findings have been identified by Lilley (2008), but with the added dimension of cultural barriers being identified as another factor. Lilley found that Māori students with low levels of cultural competency struggled to successfully seek information whereas students with high levels of cultural competency had increased confidence in seeking information regardless of the context in which it was being sought.

Another angle on information barriers was identified in Agada (1999) in his study of inner-city gatekeepers. This showed that in communities where there was a reliance on key individuals (gatekeepers) to supply information to members of the community, this reliance could result in a barrier as the gatekeepers may lack awareness of relevant resources or may have a pre-disposed preference for some sources based on familiarity with those resources (thus potentially consulting completely the wrong resource for the information needed). Agada attributed this partly to the law of least effort and the fact that gatekeepers will not use services perceived to be difficult or unfriendly. Thus, the individual preferences of these gatekeepers would not only restrict their own information options but also those of the members of the communities that rely on their assistance. Although there are no similar studies involving Māori communities, parallels could be drawn with tendencies for Māori to rely on key individuals within a whānau, to provide information to others on issues involving the economic and social well-being of the collective or individual members of the whānau.

The digital divide

Another major barrier in accessing information is a lack of the common information access tools. This is particularly relevant in the 'digital age' where there is a heavy reliance on information and communications technology. Lack of access to this technology has now become commonly referred to as the 'digital divide'. This divide is not only a feature of third world countries, separating them from the advantages enjoyed by the developed nations, but is also prevalent within most developed nations and is typically illustrated in the gap between rich and poor. In many developed countries, this gap is also related to ethnic differences. Dance (2003) highlights the situation in the United States of America where even though all racial groups increased their access to technology by 3.5 times in the period between 1994 and 1998, African-American and Hispanic households' usage was still substantially behind White-Americans and non-Hispanics. Dance states that during this same period the 'digital gap' had increased more than five times.

In New Zealand there have been a number of investigations into internet usage and the digital divide. (Corcadden, 2003; Gibson, 2002; Parker, 2003; Kamira, 2003; Botha, 2001; Ministry of Social Policy, 2000; Bell et al. 2008; Fink-Jensen, McLennan, and Dickinson, 2001). These studies all highlight that the digital divide in New Zealand applies mostly to Māori and Pacific peoples.

Corcadden (2003) states that, in New Zealand, those who are less likely to be using information and communications technology are Māori, Pacific Island peoples, peoples with low income levels, sole parent families, people living in parts of rural New Zealand and senior citizens. She concludes that these disparities are similar to those in other countries. Corcadden's study was centred on information technology access at home for Māori and Pacific Island students, and revealed that the cost of a computer was perceived as the most significant barrier for students wishing to secure access at home (p. 9).

Corscadden's study confirmed the trends identified by Gibson (2002) and Parker (2003), both of which focus on digital divide trends within the Māori community.

Gibson (2002:92-93) found that, whereas 46 percent of European / Pākeha respondents live in dwellings with Internet access, only 25 percent of Māori respondents and 20 percent of Pacific Island respondents are in net-accessible dwellings. This is further compounded by the proportion of Māori and Pacific Island respondents living in a dwelling with a telephone being 10 percentage points lower than for the rest of the population.

Gibson's study also involved a survey of internet usage, classifying those aged over 10 years and having used the internet in the past four weeks as regular users. His survey revealed that 47.7 percent of New Zealanders could be considered regular internet users. Whereas 50 percent of European / Pākeha respondents were regular users, only 33 percent of Māori respondents and 24 percent of Pacific Island respondents were also classified as regular users. Gibson did however identify that part of the "Māori gap" could be offset by Māori respondents having a higher rate of irregular use, at 8.4 percent compared to the rest of the survey respondents (6.6 percent).

Parker (2003:460) discusses results from a survey by AC Nielsen. Their *Netwatch 2000* survey findings linked internet access to household income levels. Results indicated that 11 percent of households with an annual income of \$20,000 or less reported having internet access, compared with 67 percent of households with income of \$120,000 and over. Māori have lower levels of income than non-Māori. This is represented in the median annual income figures for the year ended 31 March 2001 where the median annual income for Māori adults was \$14,800, whereas the median annual income for all adults was \$18,500.

These findings are further supported by research released by the Ministry of Social Policy (2000) and Botha (2001). The Ministry's report revealed that nearly 33 percent of Māori people of working age wanted Internet access, but did not have it because of cost. Another 10 percent also wanted internet access but did not have it for other defined reasons. Botha conducted a survey of 1520 rural residents, which showed that finance was identified as a barrier to accessing information and communication technologies for 84 percent of Māori respondents, compared with only 65 percent of all respondents.

Parker (2003:460) also refers to a survey conducted by Netwatch that linked internet access to educational achievement. The Netwatch survey revealed that just 21 percent of people with no school qualification had home internet access, compared with 64 percent of the respondents with university degrees. The link between Māori and the digital divide was illustrated by the fact that Māori adults' attainment of formal educational qualifications is lower than that of the New Zealand population as a whole. The 2001 Census showed that 43.6 percent of Māori adults had no school qualifications, compared with 27.6 percent of all New Zealand adults. The census also found that 4.7 percent of Māori adults had a university degree, compared with 11.8 percent of total adults. The 2006 Census results from Statistics NZ (2008), demonstrated that although the proportion of Māori over the age of fifteen with no school qualifications had decreased to 39.9 percent, the actual numbers had increased from 122,472 in 2001 to 130,146 in 2006. During the same period the proportion of all New Zealanders over fifteen with no qualification had dropped to 25 percent.

Gibson (2002:95) links digital divide and internet access issues to the unequal distribution of information and communications technology training skills. To some extent the upskilling of Māori in the use of information technology is being addressed through tertiary education courses and programmes.

Kamira (2003:473) identifies a three step process that links skill levels, the infrastructure, and the need for the right environment as being the key to Māori shifting from a low socio-economic status, bridging the digital divide, reconstructing Māori knowledge, and then being able to use information technology to the best advantage. To enable this she outlines a need for Māori to have some power and control in the decision-making processes about technology, and an involvement in policy and law making processes to ensure cultural and intellectual property rights are identified when Māori information and knowledge content is considered.

In contrast, the study by Bell et al. (2008) identifies that internet access issues of Māori are more complex than other populations (other than Pacific peoples) and that they generally tend to have less access to the internet. However, if they are users, they tend to be more frequent users than Pākeha (Europeans) across most types of online activity, particularly in the use of online social networking applications.

A report by the Learning Centre Trust in 2001 (Fink-Jensen, McLennan, and Dickinson) revealed that, in comparison to primary schools, Māori medium schools had fewer CD-ROM curriculum support and other reference materials available, employed fewer technicians, and were less advanced in terms of the stages of information and communications technology adoption. The report also showed that almost half of the Māori medium schools had less than 25 percent of their classrooms connected to the internet. In comparison, only just over 25 percent of all primary schools were reported to be in this same position. This situation would further exacerbate the digital poverty position for Māori in these schools if they also lacked access to information technology at home.

It is clear that the digital divide is a major influence in creating information barriers, as are the issues identified by Harris and Dewdney, Julien and Agada. However, to identify a comprehensive list of barriers for Māori it would be necessary to take other factors, such as educational

achievement, literacy levels, financial pressures and health issues, into consideration.

Conclusion

This chapter has provided readers with an understanding of the theoretical basis of information seeking behaviour, and how it relates to what we know about Māori engagement with information and the barriers they encounter when attempting to access information. There are three key findings that emerge from the literature that has been discussed. The first finding is that existing models in the information seeking behaviour field, with the exception of studies by Fisher; Chatman; and Savolainen, are on the whole inappropriate for any discussion of Māori information seeking behaviour. This is due to their lack of acknowledgement of the influence that culture and values have on Māori. The second key finding is that there is a paucity of existing literature on information seeking behaviours of Māori, which has led to a lack of awareness of the different needs of Māori amongst theorists, policy makers and information practitioners.. The third key finding from the literature is the role that the digital divide plays in creating information behaviours for Māori, and this is supported by the findings in chapter eight of this thesis.

This chapter has identified the literature and theoretical constructs that have helped me to shape my approach to this research project. In Chapter Four I will outline the research design and methodology I have used to gather data on the information seeking behaviours of Māori secondary school students.

Chapter Four

Methodology

This chapter focuses on the key research questions I asked during this study, the criteria I used for selecting and designing the research instruments for the collection of the data from participants and the decisions I made when applying these in the schools involved in this study.. The human ethics challenges I encountered in the research process and how these were resolved are also discussed.

Research questions

As I explained in the Prologue, my interest in determining the information seeking behaviours of Māori secondary school students goes back to my personal experiences towards the end of my secondary school years, when upon reflection, my own information seeking methods were inadequate. My interest was piqued further by the realisation in 2005 that my niece was experiencing difficulties that were very similar to the problems I had encountered 24 years earlier. As an experienced library and information professional I was able to identify that an important part of these difficulties was related to how Māori students interacted with information, and the role it plays when they need to make decisions. This led to the formulation of my main research question, *how do Māori students make sense of the world?* and the associated research questions that place the research project into the wider context of information seeking. The importance of the research questions to a successful project is highlighted by Punch (2003:37), who describes one of the roles played by research question/s as keeping the researcher focused during their research project, particularly if the research is complicated and / or side issues threaten to take the research off course. Being able to step back from the complications and details by referring back to the research question can be of great assistance. Punch also

emphasises the need to make a link between the research questions and the conceptual framework, as the research questions operationalise the framework, focus and delimit qualitative studies, leading to the creation of a relationship between the questions and the framework that is defined by the data that has been collected.

I developed the research question and associated sub questions addressed in this project after careful consideration of the literature surrounding information seeking behaviour and identifying the gaps in the literature, particularly in relation to the lack of previous studies on Māori and other indigenous peoples. The research questions are designed to address the two principal factors being considered by the project, information seeking and Māori identity. The principal research question is:

How do Māori secondary school students make sense of the world they live in?

Sub-research questions also of importance to this study include:

What are the principal sources that Māori students consult when they are seeking information?

Do these sources vary according to the cultural context they are searching in?

Does strength / weakness of Māori identity play a factor in information seeking behaviours?

What information barriers exist for Māori students and do these vary according to the cultural context?

Methodological process

Once the topic of the research project had been determined, the next step was to identify a research process that would ensure that the data gathered would be sound, meaningful and representative. My supervisors and I agreed that the aim was to produce a methodology that would be able to be applied to cohorts of Māori students in other parts of New Zealand and adapted so it could be used in an international context with indigenous youth. This would allow comparative studies to be undertaken.

In undertaking this research I recognised that it was essentially the first research project of its type to be conducted in a Māori context (and also possibly in any indigenous population); as a pioneering project in this field there were no specific models from the literature to follow.

Traditional research methods offer two basic alternatives, a quantitative approach or a qualitative method. Both methods provide a variety of options for researchers to administer the survey instruments that fulfil the needs of their research frameworks.

In designing the research methodology for this project, I considered the range of options available. As I and all of the intended participants were of Māori descent, I assessed Māori focused research methodologies for their usefulness for constructing a methodology that would produce results that could make a contribution to Māori development.

Māori-focused methodologies emerged in the 1990s through the works of Graham Hingaroa Smith and Linda Tuhiwai Smith. The methodologies have been enhanced through their application in a variety of Māori research projects; examples of these include Smith (1999), Pihama, (2002), Cram, (2001, 2004). Various definitions of kaupapa

Māori (Māori research methodologies) exist in the literature. Kathie Irwin (1994:27) describes kaupapa Māori research as

research which is 'culturally safe', and involving the mentorship of elders, which is culturally relevant and appropriate while satisfying the rigour of research and which is undertaken by a Māori researcher, not a researcher who happens to be Māori.

Another is supplied by Russell Bishop (1996), who places his model within a framework that focuses on power relationships between Māori and non-Māori researchers in the context of the Treaty of Waitangi. Bishop recognises that non-Māori have a role to play in Māori research, largely in a partnership focused role whereby they can serve a supportive, collaborative and empowering function, with the ultimate aim being that "Māori people should regain control of Māori people's lives."

Graham Hingaroa Smith is cited by Smith (1999:185) and places kaupapa Maori research methodologies into the context of Māori desires for self-determination in wider New Zealand society. He describes the context of this research framework in the following four statements:

1. *is related to being Māori;*
2. *is connected to Māori philosophy and principles;*
3. *takes for granted the validity and legitimacy of Māori, the importance of Māori language and culture; and*
4. *is concerned with the struggle for autonomy over our own cultural well being.*

Other models of Māori focused research methodologies emerged in the 1990s. Cunningham (1998), in a paper delivered at the *Te Oru Rangahau Conference*, lists three different types of Māori-focused research methodologies including kaupapa Māori research. The other two methods are research involving Māori and Māori-centred research. Cunningham's paper describes both kaupapa Māori and Māori-centred

research methodologies as having Māori as significant participants, the research team being all Māori and the method of collecting data mainly following tikanga Māori (Māori cultural practices). While these methodologies will also include some mainstream elements such as literature reviews, the research analysis occurs in a Māori framework and results in the creation of Māori knowledge. The research outcomes from the application of this methodology primarily meet expectations and quality standards set by Māori. Important to the success of this methodology is the focus on keeping the research agenda, practices and analysis in a Māori epistemological framework.

The major point of difference between the two is the fact that the control of the research in the Māori-centred methodology is normally mainstream, whereas control of kaupapa Māori research is kept by Māori. The Māori-centred model has been further enhanced by research based in *Te Pumanawa Hauora*²³ and led by Professor Mason Durie.

Methodology of this research project

In assessing the desired outcomes from the research project, I determined that the design of the project, research participants and researchers met most of the criteria to qualify as a kaupapa Māori focused research project. However, due to my desire to have the research considered in the wider context of the international information seeking and behaviour research community, I decided to stay within a mainstream²⁴ mixed methodological framework that could incorporate aspects of tikanga Māori into its application.

I decided to deviate from the accepted model of kaupapa Māori-centred research on the grounds that the results from the research will make a contribution to the international information seeking and behaviour

²³ <http://hauora.massey.ac.nz/>

²⁴ Mainstream here is used in the same context that other authors and scholars would use Western frameworks and I have used it to illustrate the point of difference from Māori methodological frameworks.

research tradition, which is firmly based in the mainstream framework. By incorporating tikanga Māori into the methodology, the project provides an opportunity to recognise the unique position of Māori in the world and Aotearoa (New Zealand).

Quantitative and qualitative research methods

Although both quantitative and qualitative research methods are accepted by the research community, I recognised that neither method on its own would be suitable as a tool for gathering the data required for this project.

Punch (2005:64), in his description of the attributes of quantitative methods, identifies that the strengths of these methods are the development of strategies to allow the comparison of data and to determine the value of research variables of that data. Studies conducted in the quantitative method are traditionally weighted towards well constructed conceptual frameworks. A quantitative study will typically involve a close relationship between the research design and the conceptual framework that will be used to analyse the data and present the results. An integral element of quantitative studies is the relationship between the variables and how they are arranged conceptually in relation to each other. Variables are best described as measurement variations, in that they indicate major and minor points of difference between the research data that has been collected. In the literature on quantitative research methods, variables have been classified in different ways.

Punch (2005:85-86) describes variables either as discrete variables or continuous variables. Discrete variables (also known as categorical variables or discontinuous variables) are different in kind rather than in degree, amount or quantity. Such variables might include eye colours, gender, religious affiliation, occupations, and most kinds of treatments or methods. Continuous variables (also known as measured variables) are

those that vary in degree, level or quantity, rather than in categories. Differences in degree relates to rank ordering (first, second, third etc.) according to some predetermined criterion, but this does always indicate the difference between the places. Although this can be achieved by adding an interval of measurement, this leads to the creation of a continuum, with intervals, showing less and more of the characteristic. Punch (2005:86) cites differences in height, weight and age as examples.

Qualitative research methods

Creswell (2003:181) describes research undertaken in a qualitative framework as being placed in a natural setting, whereby the researcher conducts the research at the site (home, workplace, educational institution, etc.) of the participant/s. The methods of data collection in a qualitative study most often involve the active involvement of research participants. Creswell also stresses the importance of researchers in qualitative studies building rapport and credibility with their research participants. It is recognised that in the process of the qualitative study research questions and data collection methods might be altered, due to unexpected themes emerging during the research process. The data collected in a qualitative study is normally subjected to interpretation by the researcher. This might include describing individuals or groups of participants, identifying themes or categories amongst the data, and drawing conclusions about the significance of the data through a personal or theoretical lens. An integral element of qualitative studies is the personal reflection and acknowledgement of the researcher as to how their own influences, biases, values and interests might influence the research process.

In developing the research methodology for this particular study I wished to acknowledge that both quantitative and qualitative methods were of relevance to the research questions that the project wished to address. Therefore, I decided to use what is commonly known as a mixed

methodology, using quantitative methods (a questionnaire) and qualitative methods (focus group interviews), supplemented by evidence from the literature on Māori research methods, and information seeking and information behaviour research. In choosing the mixed methodology option I believed I could utilise the strengths of both methods, and in tandem these could assist in negating weaknesses that are evident in both forms.

Mixed method research has been described by Creswell (2003:18-20) as an approach in which the researcher tends to base knowledge claims on pragmatic grounds (e.g. consequence-oriented, problem centred and pluralistic). Collecting data involves using strategies of inquiry either simultaneously or sequentially to best understand research problems. The data collection also involves gathering both numeric information (e.g. on instruments) as well as text information (e.g., on interviews) so that the final database represents both quantitative and qualitative information.

Punch (2005:240-241) stresses that the reasons for combining methodologies are to capitalise on the strengths of the two approaches and to compensate for the weaknesses of each approach, with there being more than one way to combine the methodologies depending on the context of the research. Such approaches might include

1. adding one approach on to another;
2. interweaving the two approaches;
3. integrating the two approaches; or
4. linking the two approaches.

Punch (2005:241) also stresses that the meaning of the research will often determine the degree of complexity of the mixed methodology research design. At the more simplistic end of the scale, this might mean that quantitative and qualitative data and methods are not combined, only the results from the two lines of inquiry are. Combining data means

that the two types of data are brought together during the analysis and contribute to the findings.

By choosing the mixed methodology I believed that themes, variables and extremities exposed in the quantitative research could be explored in greater depth in the qualitative phase, thus linking the two approaches.

School selection

In designing the pathway to apply the methodology designed for this project, a number of factors needed to be taken into account. The principal participants in the project were Māori students enrolled at four different secondary schools.. The students were required to be sixteen years of age and over as this would eliminate one of the steps in the already complicated consent process²⁵, and to be a member of the senior school (Years Eleven, Twelve and Thirteen). In order to develop a robust quantitative sample, I determined that it would be necessary for the schools selected to be able to make a sizable contribution to the desired level of 200 students eligible to participate in the project. This was a particularly difficult exercise to achieve, because it was not always easy to determine the size of the senior school as published school roll statistics were not normally broken down by ethnicity or by year of enrolment. Another difficulty in identifying suitable schools is the trend for Māori students to leave school at the legal leaving age (sixteen) and not proceed into the senior school (and this is evident in the next chapter that focuses on the results, where the number of eighteen year olds participating in the survey were greatly outnumbered by those in the younger age groups).

There were three essential criteria for the selection of a school to participate in the study. They needed to have a cohort of at least 40

²⁵ Ethical guidelines require students aged fifteen and under to have consent from their parents/caregivers. By restricting the study participants to those aged sixteen and over meant that they were able to give informed consent to their involvement.

Māori students aged sixteen and over in year eleven and above, a decile rating that was similar to the other schools in the study, and a commitment from the Principal, senior staff and the Board of Trustees to co-operate and provide access to the school and the students eligible to participate in the study. The number of students was important as it meant that the answers in questionnaires and focus groups would have a better chance of anonymity. By having similar decile ratings, it was thought that schools would have comparable facilities and there would be less variation in socio-economic levels. Finally, as there was an expectation that the schools would not only identify students eligible to participate in the study but also provide school space for the questionnaire and focus group sessions, the co-operation of the Principal was vital to the success of the research.

In order to identify possible schools, I used statistics provided by the Education Review Office²⁶ in their assessments of each school. I determined that schools with a higher percentage of Māori students amongst their school rolls would have a higher chance of retaining these students through to the senior school. Each school that fell into this category was approached and was asked for an estimate of the number of students meeting the criteria of being identified as Māori, aged sixteen and over, and in Year Eleven, Twelve, or Thirteen. Those schools which had enough students at the right levels (age and year of study) were shortlisted, with a note about the number of students and their decile rating. Once this process was completed the schools were ranked according to these two criteria and an approach was made to the school principals.

The four schools finally selected for this study differed remarkably from each other. Two were pre-dominantly Māori and were also single sex boarding schools; the other two schools were co-educational schools,

²⁶ www.ero.govt.nz

one urban and the other rural, with Māori students being in the minority at both of these schools.

The consent process

For each school that met the criteria, I made an appointment to meet with the principal. At the time of making the appointment, I spoke to the executive secretary (or equivalent) and explained that the appointment was being requested to discuss the possibility of conducting a doctoral research project within their school's Māori community. This was intended as an icebreaker, so that the principal of each school would have some (albeit little) context of the purpose of my appointment. In preparation for each appointment, I prepared a letter introducing myself, the project and its purpose, as well as an information sheet that provided a broader overview of the purpose of the project, the intended participants and information about the human ethics obligations that I had agreed to²⁷. These were taken with me to my appointment with each principal, as it was considered to be in keeping with tikanga Māori and the principle of kanohi ki te kanohi (face to face contact) to do so rather than to mail the letter to the school.

The purpose of the meeting with each principal was to give them an overview of the project, information about myself, gain their consent for the project to proceed, agree on a research pathway for the administration and application of the project in their school and answer any questions the principal might have about the project or my background. Finally, as the principal is the administrative and managerial head of their school and the governance of the school is overseen by the school's board of trustees, I saw it as being necessary to gain the permission of the principal to approach the board of trustees to obtain their consent to conduct the project amongst the school's Māori

²⁷ The human ethics process is discussed in greater depth later in this chapter

student body. I also offered to meet with the school's whānau committee (Māori committee), if they had one.

Of the four principals approached only two decided to refer me to their board of trustees. This is probably a reflection of the difference of cultures between the schools and the different relationships that various principals have with their boards of trustees, and also reflects the dynamic tension that exists between governance and management worldwide in schools (and other organisations). One of the boards of trustees took up my offer to meet with them, and to make a presentation about the research project purposes and the likely benefits for the school and Māori students. The other board of trustees did not require my presence at their meeting, choosing instead to base their decision on the documentation supplied (letter to the board chair and an information sheet). The information sheet was similar to the sheet that had been given to the principal, but tailored for the members of the board. The decisions of both boards were conveyed after the respective boards had met and in both cases the positive response to the request was strongly encouraging.

For the schools where the principal determined that it was not necessary for the board of trustees to be consulted, I provided a tailored letter to reflect that the principal had taken responsibility for granting consent for the project to proceed in that particular school. I also provided the board with a copy of the information sheet that had been presented to the other boards. The letter invited the board to contact me or my supervisor if they had any concerns or questions about the administration or application of the project within their school. In order to keep faith with the principal of the schools, the letter and the information sheet were routed via the principal's office so they were kept in the information loop and they could ensure that their authority was not being undermined by me. No questions or concerns have ever been received from the boards of trustees in question.

Although I had also offered to meet with each school's whānau committee, this was not taken up by any of the principals. In each case I emphasised my willingness to discuss the project with the committee or individuals of the committee at any time. No questions or concerns have emerged from that quarter.

The questionnaire

Once permission had been received from the school for the project to proceed, arrangements were made to administer the questionnaire to the students. Each of the principals agreed to contact eligible students within their school, asking them to meet with me at a central location in the school. Schools keep their information about students on an administrative database that is confidential. I was therefore not able to access this data myself, so I was therefore highly dependent on the principals and their administrative staff to access the database and extract the necessary data about age, year group and ethnic identity on my behalf. As the schools were receiving extra financial loading for Māori student enrolments, I had total confidence in the accuracy of the information that was extracted.

At the first meeting with the students, I provided an overview of the project, what their role in it would be and the benefits of participating in it for themselves, their school and for wider Māori society. At this meeting, each student attending was provided with an information sheet giving further details about the project and what their contribution to it would be. The students were also encouraged to ask questions about the project. Not surprisingly, the questions were focused on what was in it for them and why anyone would want to research what their choice of information resources was. Other questions were focused on what a PhD was and how you get to do one, my background and how their answers were going to be used. The students were not only curious about the project and my intentions with the data, but also engaged in discussing career and study options. Although it was conducted within a

school and there was a teacher / guardian present at this meeting, the atmosphere was relaxed (at two schools the venue used was a classroom, one used the school library and the fourth school the school hall) and there was much humour used by myself and the students. Once the discussion was concluded, students were provided with an opportunity to indicate whether they were willing to participate in the project by completing the questionnaire. It was emphasised to the students that completion of the survey was voluntary, answers were anonymous and that if they chose to fill out the questionnaire they were giving me their consent for the information to be used for the purposes outlined in the Information sheet. Any students not wishing to participate in the research project were invited to leave at this stage and a limited number chose to do so. Those students remaining were then given a questionnaire to complete. It had been agreed by all four school principals that the students would be given the opportunity to complete the questionnaire at that time. This meant that they would have access to me to clarify any question they did not understand, but it would also give me the opportunity to collect the surveys from the students as they completed them and not have to rely on them to return the survey to another location at another time. At one school this process was slightly varied due to a number of senior students being involved in an assessment for National Certificate of Educational Achievement (NCEA) qualifications. At this school, the senior teacher identified the students that were involved in the assessment and collected the questionnaires, information sheets and focus group expression of interest forms on their behalf and arranged for them to be returned to me.

The process used to distribute the questionnaires resulted in a very high return rate being achieved (with only two of the surveys collected from those remaining not being completed). At three of the schools the meeting with me and the administration of the questionnaire took place during normal school hours; and at the fourth school it was held after normal school hours. Therefore the decision to stay and complete the survey might have been more attractive for the students at the first three

schools as it meant that they missed less attractive classes in their timetabled schedule for that particular day. The students at the fourth school, I later found out, were pleased to assist me as it was conducted during a time that they would normally be undertaking their preparatory studies (and this would explain why they were the group that took the longest to complete their questionnaires).

Focus groups

At the time of meeting with the students to discuss and administer the questionnaire, I invited those present to consider participating in the next stage of the project, which was the participation in focus groups with their peers from their school. The purpose of focus groups, how they operate, the amount of time involved and how the questions asked at a focus group session would vary from the questionnaire was discussed with those present. Any student interested in this aspect of the study was asked to indicate their willingness to participate on the expression of interest form that was distributed to them along with the information sheet and the questionnaire. As this sheet required them to state their name and their year group at school they were asked not to hand them in with their questionnaire but to place them in a separate box, so that their questionnaire would maintain its anonymous nature. Students that volunteered were told that they would be contacted via the school to arrange another date for the focus groups to take place. At the meeting with students, the questionnaires were collected in one box and the expression of interest forms were collected in another. Neither I nor the teacher / guardian present viewed any of the questionnaires or focus group expression of interest forms. The boxes were then sealed and immediately removed from the school. At the fourth school a further fourteen questionnaires were collected by the teacher from the students that had been undergoing their NCEA assessments at the time I had been meeting with the other students. These questionnaires were posted to me by the teacher who had collected them on my behalf.

Once I had checked the questionnaires and entered the data gathered from them into an Excel spreadsheet, I compiled the list of volunteers for the focus groups from each school. After the list was compiled, contact was made with the school to arrange a time and a date which would be convenient for the school, the students and myself. I did feel slightly uneasy about arranging the focus groups through the school as the staff of the school would be aware of which of their students were participating. However, I was dependent on the school's goodwill and co-operation regarding the venue for the focus groups and access to the students, and because there would be no teacher / principal present at the focus groups it was thought that the anonymity of the focus group contributions would not be compromised.

The original research plan had been to select focus group participants from the volunteers, but after taking into account the possibility that not all selected volunteers would be able to attend a focus group at the time mutually arranged, it was decided that all volunteers would be invited to participate, with the expectation that there would be an attrition rate. From the original list of 60 volunteers only 45 took part in the focus groups. The other volunteers were either not at school, occupied elsewhere at school or, as was the case for a number of students, had left school.

In most cases (three out of the four schools), the length of time that elapsed between the two sessions was no more than four weeks. The gap at the fourth school was closer to eight weeks, due to an unforeseen illness on my part and the difficulty that the school had fitting the research project into the school's schedule.

The original research methodology proposed to use interviews with individuals for the qualitative phase of the project. However, the Human Ethics Committee advised me to not place myself in the position of being left unsupervised with individual students. Other methods of conducting the interviews were considered such as having a parent / guardian or a

teacher present, but it was considered that this might inhibit the student being interviewed as they may have felt that some of their answers might lead to consequences later at home. Another option was for the students to bring whanau support with them (a close friend or a sibling, cousin etc. that they felt comfortable with). It was recognised however that we could not make this compulsory and that not all students might have someone in this category. The other method considered was for me to bring another adult with me to the interviews, who could act as a chaperone / witness and a transcriber. This however was considered inappropriate, as it was recognised that this would be potentially quite intimidating for the student as he / she would be being interviewed by two 'relative strangers' which could lead to the student feeling unsafe. After considering these options it was finally decided that perhaps the best approach was to construct focus groups of the different student groups.

I chose focus groups as it allowed me to confirm and explore further the data and trends from the survey questionnaire. Stewart, Shamdasani & Rook (2007:42) state that "one of the most appealing features of focus groups is their robust versatility for shedding light on almost any topic or issue", although they also state that there are distinct advantages and disadvantages to using focus groups. Some of these advantages include quick results, flexibility, direct interaction between the researcher and the respondents which allows follow up and probing questions, and observation of non-verbal gestures (which can confirm or contradict the verbal response). Interaction between participants and spontaneous reactions to each others' responses may result in richer information that might not have been uncovered in personal interviews. This is particularly valuable when there is disagreement or differences of opinion, as it can help to understand why these differences occur. In recognising these advantages it is also important to understand that focus group interactions also have disadvantages. These can include having focus groups that involve a low number of participants, bias caused by dominant members of the group and focus group participants'

interactions that are not independent of each other. Researchers should be aware that summarising and interpreting results from focus groups can at times be difficult due to the open ended nature of the participants' responses, and wary of inappropriate or leading cues from the facilitator as to the types of answers that are desirable or they are seeking. Other advantages of focus groups are identified by other researchers such as Hess (1968) who is cited by Stewart et. al. (2007:46-47). Hess lists advantages in two categories. Respondent Interaction Advantages are synergism (like minds, think alike), snowballing (ideas that develop momentum), stimulation (the germ of an idea can lead to new discoveries / ideas by focus group participants), security (participants feel safe to provide opinions due to friends and peers or the facilitator not judging them), spontaneity (ideas and / or opinions formed due to participant interaction in the focus group process) while Sponsor Advantages are serendipity (having participants altogether can lead to new discoveries), specialisation (being able to focus on specific aspects / trends of the field being studied), scientific scrutiny (able to analyse results within a defined methodological framework), structure (the focus group questions are predetermined, allowing different sessions to have a similar structure to each other) and speed (quick responses / results are delivered by participants).

Another distinct advantage of focus groups is that they allow the participants to not only express their own opinions but to express them in their own words. This is not always possible in individual interviews, and questionnaires are more likely to be less flexible and aim to extract a formulaic or structured response.

The construction of the focus groups differed according to the number of volunteers at each school. At two schools the numbers warranted two focus groups, while the other two involved a single session. The aim was to have no more than ten participants at any one focus group and this fits into the guidelines recommended in the literature. Only at one

school was this guideline not adhered to, when we had eleven students in one session.

Each school was asked to provide a room that would enable a focus group to be conducted in it, in relative comfort, free from distractions and with facilities including a whiteboard and a board table (or a collection of tables that could be grouped together). Two of the schools chose their school library as the focus group venue and the other two chose their boardroom.

At each focus group venue I greeted the participants, introduced the transcriber, explained once again the purpose of the project and the rationale behind the focus groups and established the operating principles for the focus group. As the focus groups either coincided with their morning or afternoon tea breaks I provided some refreshments for the participants. The refreshments ensured that the participants had an opportunity to relax, check out the other participants and participate in informal conversation.

The transcriber took notes on a laptop during the focus group sessions and I audio-taped the sessions. I later checked the transcripts against the recordings, amending them where necessary to ensure that contributions from all participants would be captured in the data analysis phase of the project.

The questionnaire structure

The questionnaire was designed by me and included twenty-four questions covering a range of areas of interest. The questions were arranged in six different parts.

The first part of the survey focused on career information seeking. In this part, the participants were asked about their intentions for the following year (at one school this was 2007 and at the other three schools it was

2008), the subjects they were currently studying and whether they had made a decision about what kind of career they would like to have in the future (this was a simple yes or no question). Each participant was then asked to indicate from a list of information resources what they had used to assist them to arrive at this decision, and how useful they found these resources in helping them to make their decision.

The second part focused on information seeking for homework (intended to be academic achievement – but phrased as homework so that the information seeking behaviour was placed in a context that was highly relevant to most students). Questions in this section focused on the average amount of homework undertaken each day, where the homework was undertaken (home, school, library, etc.) and the information sources consulted and how useful they were.

In the third part, the questionnaire shifted its focus from 'worldly matters' to the realm of Māori information sources. The main focus of part three was whakapapa (genealogical information). Like the other parts, participants were asked to indicate what resources they used from a list of possible resources to find information about whakapapa and to indicate their degree of usefulness. An integral component of this section was to get an overview of each participant's identity indicators, as whakapapa intrinsically links one's identity with one's marae (ceremonial meeting place) and iwi (tribal affiliation). Barlow (1991: 174), states that whakapapa is

one of the most prized forms of knowledge and great efforts are made to preserve it. All the people in a community are expected to know who their immediate ancestors are, and to pass this information on to their children so they too may develop pride and a sense of belonging through understanding the roots of their heritage.

Participants were also asked to indicate, from a list of options, to what extent they knew their own whakapapa. This list started from knowledge of one's own immediate family, through the generations of tupuna (ancestors) to knowledge about whakapapa back to their tupuna of four generations previous on both their paternal and maternal sides. Participants were also asked to indicate to what degree they were able to speak and understand te reo Māori (Māori language). This was spread over two questions as it was recognised that some participants would possibly be able to speak or understand te reo Māori but some might have different competencies levels for the two different skills.

The fourth part's focus was on tikanga Māori, and what resources participants used to find information in this area and how useful these resources were. In the analysis stage of the research project, the data on identity in whakapapa information in part three is linked to the results from this section.

In the fifth part, the emphasis shifted to identifying whether the questionnaire participants experienced any information access issues. Of particular interest here was whether they had encountered any problems when searching for information. Once again, the participants were provided with a list of possible problems and were asked to indicate whether they had experienced any of these. The participants were also provided with an opportunity to list any other problems that they might have encountered that were not already on the list. The participants were also asked to indicate how often they were able to access the internet and places where they accessed the internet.

The sixth part focused was on obtaining more information about the participant and their whānau (extended family). Like most questionnaires, this included personal questions about their age, gender, year at school, school subjects being studied and information about the ethnicity of the parents / caregivers and their parents' highest level of educational attainment. The last part of the questionnaire gave each

participant an opportunity to make any general comments about their experiences in seeking information.

In an attempt to ascertain the level of knowledge of tikanga and te reo Māori, participants were asked to answer questions that revealed their degree of cultural competency. This was particularly relevant to the questions in the survey that focused on Māori information resources. The other questions in the survey related to the four different areas of interest to the study, these being information seeking relating to future career interests, academic achievement, tikanga Māori and whakapapa knowledge. For each area of interest the participants were asked to indicate, from a list of resources, what information sources they used when seeking information about that area and then to indicate on a Likert scale (one to five) how useful the resource was to their information seeking quest. Not useful was rated at one and very useful at five. The participants were also able to state other items not on the list and to also indicate their degree of usefulness. Another key question in the survey asked participants to identify barriers that they encounter when seeking information in either cultural context; a number of potential barriers were listed for the participants to choose from along with space to provide responses about other barriers not listed.

It was estimated that the questionnaire would not take any longer than thirty minutes to complete, with the whole session taking approximately forty-five minutes to allow time for the survey to be explained, questions to be answered and the surveys and the expression of interest forms to be collected. The timing of the session was carefully planned to ensure that it did not impact negatively on the school (running into a second class period) and the students (ensuring that if a session was scheduled before a lunch or tea break that it not cut into that break) as it was important to maintain the goodwill of the school management, teaching staff and students. Maintaining the goodwill of all groups was essential to ensuring their continued co-operation of the later stages of the project.

The focus group sessions

The focus group sessions were designed to enrich the data collected from the survey. Each focus group was asked eight fundamental questions that were open ended, all of which were followed up with a series of probing second tier questions designed to extract the core themes that had emerged in the analysis of the questionnaire data. Although I attempted to ensure that there was consistency across the focus groups, particularly with the follow up questions, I recognised that, due to the dynamics of some of the focus groups, more follow-up questions had to be used to spark discussions which had started up in a natural manner in the other focus groups.

At the commencement of each focus group, I welcomed students with a mihi whakatau (informal greeting) in te reo Māori, ensuring that my legitimacy as a Māori researcher was established through usage of my pepeha (cultural identifiers). My affiliations with Massey University and the library and information profession helped put the research into a context that could clearly be understood by the students. As a researcher, I was also conscious that, as a manuhiri (visitor) to their school, I made it obvious that, as tangata whenua (hosts), I would be guided by their kawa (cultural practices). This was an important factor in attempting to ensure that I could obtain their trust by reinforcing and enhancing their mana (status) and not coming in as an outsider and dictating to them how to act and practice culturally in their school. This had been discussed earlier with the principal and / or senior teacher I had previously liaised with.

To establish rapport with the student participants, I provided morning or afternoon tea (depending on the time of day), consisting largely of what most teenagers would consider to be 'top shelf' chocolate biscuits. This not only endeared me to the students (chocolate biscuits are a currency that speaks volumes in a school setting), but effectively broke down any barriers between the students and me. In following my decision to allow

the kawa (protocol) to be determined by the students, the students were given the option to say a karakia (prayer) before the consumption of the food; of the six focus groups only three took the opportunity to say a karakia. No pressure was placed on any of the students to say the karakia, but the option was there for any of those present to perform it and, if there was desire for a karakia from the students but no volunteers, I was available to recite one myself. This was only necessary on one occasion.

Before the formal part of the focus group started, I explained the purpose of the research project once again, and each participant was issued another information sheet and a consent form. Students were also given the opportunity to withdraw at this point if they no longer felt comfortable participating in the session.

The consent form was signed by each student before the session commenced, to ensure that all those present had agreed with the conditions set out in the form. The consent form had three elements to it. By signing the consent form the participants agreed to maintain the confidentiality of the discussion (no discussion with non-participants), to the session being audio-taped, and to allow me to use the data from the focus group for the purposes of my doctoral thesis and any subsequent publications arising from the project. It was emphasised to the students that although the school would receive results from the research, that the results would be an accumulation of the discussion at the four different schools and although direct quotes might be used in the report and / or the thesis, no information identifying any of the participants would be included. I also assured the participants that any subsequent meetings with the school's management or board of trustees would not discuss the content or the conduct of the focus group for that particular school.

The focus groups were held in rooms selected by the schools, and the researcher and transcriber had to reconfigure most of the rooms so that they would be conducive to encouraging a discussion without isolating

any of the participants. As the session was being recorded, a configuration around a board table (preferably round or square) was considered the optimum environment for allowing the recorder to equally pick up the conversation from all parts of the table. The table also needed to have a whiteboard close by as this was needed for recording answers to the first question. Unfortunately not all venues were able to be configured in the style desired with four of the groups being conducted around tables that were long and rectangular. At one school no whiteboard was available, so I had to use pen and paper to record the answers for the first question. The rectangular table made some aspects of the group dynamics challenging, particularly when it was obvious that some students deliberately distanced themselves from other members of the focus group. To aid recording, I had to ensure in these situations that either the participants spoke loudly and clearly enough to be detected by the tape recorder or, if they were reluctant to speak up, I would repeat their comment to them in the form of a question, so that it would be clearly heard on the recording. I kept a subtle watch on the students in isolated positions to make sure that they had an opportunity to contribute to the discussion, and on some occasions this involved asking them direct questions based on answers already provided by other participants. Using this technique not only helped in keeping them engaged but on some occasions resulted in divergent opinions being expressed that may have not otherwise been captured.

The focus group questions

As a warm up question, the participants were asked to specify what information resources they consulted on a regular basis when they needed to satisfy an information need that they had. Although many of these sources had already been identified in the questionnaire, the participants were able to pinpoint more clearly what they meant, for example, when they talked about internet sources or resources they might use in the school or public libraries. I wrote each of the sources on the white board and they were also recorded in the transcripts of the

focus groups, so they could be analysed for similarities and differences, and compared to the data already collected in the questionnaire.

As two of the focus groups were comparatively large, group dynamics were carefully managed, particularly when the groups consisted of students from different genders, age groups and social networks. In an attempt to ensure that no one participant held the floor too long or dominated the discussion, I actively engaged quieter students at regular intervals to ensure their thoughts were recorded and acknowledged. It was also necessary to ensure that an orderly discussion took place so that a clear recording could be maintained and the transcriber could keep track of the conversation for the transcript.

The focus group sessions were designed to take no longer than forty five minutes as they were being structured around school schedules, with four of them being conducted in normal school hours and the other two immediately after the close of school in a time normally reserved for preparatory studies and / or sporting activities. All but one of the focus groups was completed in the time allocated, with the one exception being the result of an enthusiastic and thoroughly engaging group (who were happy to continue into their scheduled break). At the conclusion of each focus group the participants were able to ask me any questions related to the study or any other matter they wished to have clarified. Some groups took advantage of this opportunity to ask about my own information sources preferences, while others wanted to know more about options available to them at university level.

Although the dynamics of the six focus groups were different from each other they all involved an element of formality and informality; humour was a definite feature of all groups with uninhibited laughter emanating from participants and the researchers alike. The language of all the focus groups was primarily English, but due to the topics being discussed it was not uncommon for te reo Māori to be used. Particularly admirable were the participants who were able to switch in and out of the

two languages within the same sentence. Fortunately both the researcher and the transcriber had enough fluency to follow the discussion in these situations and to be able to clarify the comments made if they were unclear or if any of the participants were unable to understand te reo Māori. At the end of one particular focus group where one student had consistently provided answers in te reo Māori, I enquired about her motivation for doing so, was it a political statement (te reo Māori is an official language of New Zealand), was she testing us or was she just practicing it in an everyday context? She replied:

“I wasn’t showing off or anything but I was trying to express my feelings in a manner that made sense to me. Some things are lost when you have to try and translate them from te reo Māori.”

Human ethics issues

The research proposal and methodology were submitted to Massey University’s Human Ethics Committee for approval. Having filled out the self-evaluation form issued by the Research Ethics Office and read the guidelines published in the *Code of ethical conduct for research, teaching and evaluations involving human participants*, the research project might have qualified for low-risk notification rather than a full application process. However, after discussing the proposal with my chief supervisor, I decided to make a full application to the Human Ethics Committee. The main reason for doing this was to test the robustness of the research methodology and the consents process. The latter was to ensure that adequate protection would be afforded to the secondary students involved in the questionnaire and focus group phases of the project, and that I would be operating in a ‘safe’ environment. This was important due to the need to protect me from being placed in a position where my actions could be misconstrued by the school or the students. The initial research proposal submitted to the Human Ethics Committee involved conducting personal interviews with students. As it was intended for these interviews to be full and frank exchanges, it would

have precluded other adults (teachers, parents, caregivers) being present at the interview and, even though students would have had the option of having another student or friend present as whānau support, it still could have ended with a scenario whereby I was left alone with a teenage student. The Human Ethics Committee believed that the potential of this scenario becoming reality exposed me at a risk level that the committee was not willing to endorse. The Human Ethics Committee advised me to change my proposal to ensure that this did not happen, suggesting that having another adult present at all interviews would be the best solution to the dilemma. Having received this advice from the Human Ethics Committee and discussing it with my Chief Supervisor, I decided to change the qualitative phase of the methodology to focus group interviews. This decision was made so that the student voice would remain paramount, and I felt that having another adult at the interviews would inhibit the student from expressing frank opinions (particularly if it was an adult that they knew). My other concern related to whether, if I had used an adult of my own choice, it might have been quite intimidating for the student to be outnumbered by two adults. This could have resulted in the student becoming whakamā (reserved) in their answers to the questions posed.

By choosing to go with focus groups elements of risk still remained, including group dynamics; the possibility that the students would be less expressive in front of their peers, either due to becoming whakamā, or not wanting to look ignorant or overly engaged with the project. The other main risk also related to the dynamics of group interactions; instead of being left alone with one student, I was exposing myself to a situation to where I was the only adult with up to ten students who could potentially derail or steer the focus group sessions in a direction that would not be conducive to the outcomes I sought. To counter this possibility, I decided to employ a transcriber as an additional resource person to be present at all focus group sessions. The transcriber would not only be able to take notes, but would also act as another stabilising influence on the students present. The transcriber I selected had

previous experience as a transcriber, was of Māori descent, was a mature student at Massey University and was closer in age to the student participants than I was. The calm, confident manner in which she conducted herself was a stabilising influence on the students participating in the sessions.

Obtaining consent

Obtaining consent to conduct the research project in each school loomed as a major barrier to proceeding with the research at each level. To assist me, my Chief Supervisor suggested that I map a diagram of the consents process so that the complexity of the process could be clearly understood and that solutions to any hurdles could be identified. An early draft of the research proposal involved me not only surveying and interviewing the students but also interviewing teachers responsible for the library and / or school librarians, and focus group sessions with parents / caregivers and whānau members. This proposal was submitted to the Human Ethics Committee and was given approval. However, after receiving further advice from my supervisors and my professional mentors (information behaviour scholars), I decided to focus my attention entirely on the students. This advice indicated that the project I proposed was too broad and that the influence of teachers / librarians and whānau could be harnessed through my interactions with the students, with any remaining gaps being filled through available literature on these topics.

Simplifying the methodology also ensured that the consent process was made more straight forward. Under the revised methodology, the process required consent for the study to proceed from the principal and board of trustees from each school, and the consent of each student participating in the project. Before administering the questionnaire, the consent process was explained to the students; consent on this occasion was granted by the student filling in the questionnaire. As I did not have access to the database of student details and the questionnaires were

anonymous, I was unable to collect a list of names of those participating. However, students that volunteered to participate in the focus group sessions did leave their names so that they could be contacted to make arrangements for session times. These names were confidential to the school (names were released to the school so that arrangements could be made) and myself, and were not used for any other purpose. Students that attended the focus group sessions were then issued with another consent form that also included clauses relating to the need for confidentiality of the sessions and granting consent for the sessions to be audio taped. These consent forms were collected by me and are stored in a separate location to the transcripts from the focus groups, so that there is no danger of any comments from any individual/s being linked back to their name.

Confidentiality

For the research process to be truly effective, it was essential that participants were assured that the methodology was confidential in its nature. The school principals and boards of trustees were guaranteed that, although the final thesis might describe some of the characteristics of their schools, the names and specific locations would remain confidential to them, myself, my supervisors and the Human Ethics Committee. The four schools all knew that other schools were involved in the project but were not informed of the name of those schools.

All students completing the questionnaire were explicitly instructed not to place their name on the questionnaire to maintain the anonymous nature of the exercise. They were also asked to hand their questionnaire in separately to their focus group expression of interest form (which, when completed would have their names on it).

The consent form for the focus groups also had a confidentiality clause included in it, as it was seen as necessary to create an environment of trust. By signing the consent form, participants would be free to discuss

the content amongst themselves, however they would not be free to breach the confidentiality of the session by divulging the content of the discussions held in the focus group to any other individuals not involved. I also reiterated my commitment to keeping their focus group comments anonymous and not commenting on specific focus groups back to the school's management and / or governance structures (board of trustees / school whānau committees).

The transcriber employed to assist with the focus group sessions also signed a confidentiality form, promising not to discuss the focus group with anyone other than myself and / or any of the focus group participants, and agreeing to destroy any copies of the transcripts after the final draft had been given to me.

The focus group sessions were all audio taped and the cassette from each session has been labelled in a manner that protects the anonymity of the schools and the students involved in them. These cassettes have been stored in a locked cabinet and are kept separately from the printed transcripts (which are also in secure storage).

Conclusion

This chapter has described the methodology I have used for this research project, the reasons why I chose to approach the study in this way, and how the results were analysed and interpreted. I have also described the significance of the difficulties in the design and application of the research instruments, particularly in the area of ethical issues and the adjustments I had to make to the methodology as a solution to these difficulties. The next four chapters focus on the results of the application of the methodology, with each chapter providing precise details about how it relates to the research questions. The next chapter provides information about the principal information grounds located within a

school context and the types of information that participants share and exchange there.

Chapter Five

Information world @ school

Introduction

This chapter is the first of three chapters that present the findings from the application of the research methodology. This chapter looks firstly to discuss the educational context and the school environment that Māori students are part of. It will then describe the different zones where they meet, share and exchange information. The nature of information shared and exchanged is described, along with the characteristics that make these zones good places to exchange information.

Attending school is one of the constants of any New Zealander's life during their teens, and as such forms the basis for a wide range of relationships, friendships, and social and educational interactions. Although some of these will be situational based, others will develop into long-term or life-long relationships. Due to the longevity of the relationship between a student and their educational institutions, school essentially becomes the teenager's second place (with home being their first place). Significant others in a student's school life will be classmates, teachers, sports team-mates and friends. Although a student may change schools several times during the course of their formal education, the consistent factors that will not change are the structure of schooling and the opportunities to form social and educational relationships.

Although the four schools I conducted my research in had a healthy number of Māori students in the sixteen to eighteen year old age groups, it was noticeable that there was a dramatic drop-off between the ages of seventeen to eighteen. The questionnaire returns demonstrate this drop off by the fact that forty-two of the participants were aged sixteen, forty-

nine were seventeen years of age, while only sixteen were aged eighteen. The significance of this reduction in numbers amongst the students who participated in my research is perhaps that a larger proportion of those in Year Thirteen were actually only seventeen. This is borne out by the fact that there were forty-five respondents to the original questionnaire that indicated they were in Year Thirteen. One of the possible reasons for this might include the fact their birthday might occur later in the year (i.e. after I had undertaken his research). It should be noted that the field research was undertaken one school at a time and therefore it took near to a calendar year to rotate around the four schools. It is interesting to note that six students who had indicated their willingness to participate in the focus group interview phase of the study had left school between the time the questionnaire was administered and the focus group sessions took place. This is consistent with the tendency for the number of Māori students to start diminishing, thus changing the nature of the personal networks within their school. Although they might have left, it is also entirely possible that their information sharing tendencies are not lost to the network, as they may participate in information exchange opportunities with their former school social network members in new information grounds. Through their new status, either in the workforce or another institution, they would also have an opportunity to develop new forms of information previously unavailable to their school based social network.

The school day

For most secondary school students the school day commences around 8.40 – 8.45 a.m. with the ringing of the bell for either a roll call or assembly. Once these formalities are over, the students are expected in class for their first subject of the day. Thereafter through the day, students change classes and subjects approximately every sixty minutes. This routine is only broken by a morning break for 15-20 minutes and a break for lunch of 40-45 minutes. School for the day normally concludes between 3.15 and 3.20 p.m. (depending on starting

time, and length of morning and lunchtime intervals). All schools operate to a carefully constructed timetable that ensures that each student within the school is occupied at every teaching hour of the day, thus enforcing a stringent structure.

School as an information ground

In the early years of secondary school, subjects such as English, Science and Mathematics are compulsory. It is not until a pupil reaches Year Twelve that they are able to exercise some choice in what area of science and mathematics that they wish to continue in.

A school provides a setting for a potentially wide range of information grounds. This is mostly due to the fact that, as a community, it has individuals compulsorily congregating each day of the week. There are also a number of spaces and places within the school where students and / or school staff can come together for a range of activities that can result in information being shared or exchanged. Each school will be different, but there will be characteristics that will be common to all schools. This is due to the prescribed curriculum framework that all secondary schools must follow, thus ensuring that schools have the right infrastructure and facilities available, such as a gymnasium, school library, science laboratories and an assembly hall.

Classrooms are not usually an information ground setting, as they typically involve a structured process whereby the teacher instructs and the pupils learn. Students may learn something new in class, but is likely to be what they are present to learn. The notion of the information ground is that it develops when people are present for one reason and end up sharing information as an aside to the reason why they are there. Although it is not an information ground in its own right, the information shared by the teacher and other pupils in the formal learning situation may actually be considered by participants as worthy of sharing in information grounds settings.

Like many workplaces, students in schools have the potential for a variety of internal cultures and subcultures to be operating, with an overlap of participants between these groups always a possibility. These cultures may revolve around different year-levels, age-groups, genders (co-educational schools only), ethnic identity, sporting and cultural interests, and hierarchical structures (such as prefects and non-prefects).

For schools that have hostels attached (as two of the subject schools did) the school effectively becomes a 'quasi-first place' for the students that reside in the hostel. Students faced with this situation are likely to form relationships with fellow hostel students that might not have ordinarily formed if they had not been placed in such close proximity to each other. Over a five year period, the development of social networks within the hostel might change significantly as members move in and out of the hostel; however the rules of exchange are likely to remain the same.

Besides the hostel, there are a number of different areas within each school for information exchange to take place. The fortunate aspect of this is that, at various times of the day, individuals will be interacting with different groups due to varied subject option selection, and where they fit into the social groups at break times and after-school. The key benefits of having a huge range of prospective social groups available are the opportunity for information exchange becoming more likely and the potential for the information shared to be more valuable.

Identifying the information grounds

Students in the focus groups were not directly asked where the areas were within the school boundaries that could be considered an information ground, as I did not wish to lead them. The fact that so many examples emerged during the discussion emphasises the value that

these interactions at school add to sustaining and enriching their information environment.

In analysing the data that was captured from the focus group discussions, I identified three distinct zones within a school's precincts where students engaged in information seeking, sharing and exchange. These three zones are the formal zone (where formal instruction and learning occurs), the casual zone (when the student is not in a formal learning situation) and the boarding zone (this includes the various parts of the boarding establishment). In identifying these zones, it is important to note that there are fundamental differences in the four schools in which the study was conducted. The four schools represent rural, urban, co-educational, boarding and single-sex schools of varying size and location. The schools involved in the study that have boarding facilities contributed a zone not present in schools without such facilities.

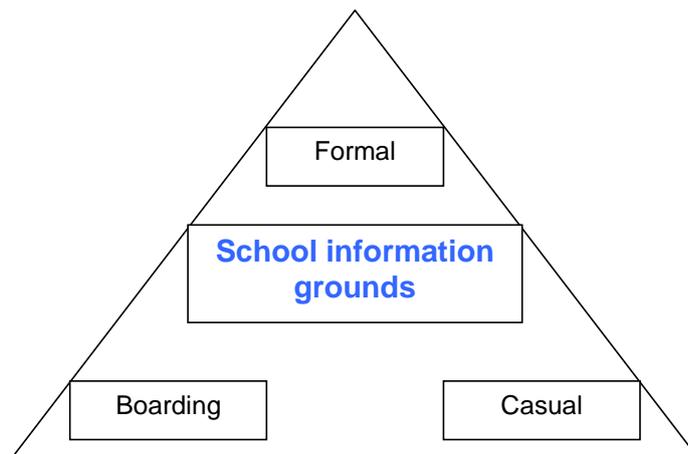


Diagram 1 School information grounds - zones

The zones

There are four distinct sub-zones where information grounds occur in a formal school setting. In each of these zones, structured activities are programmed to facilitate learning by pupils. It should be noted, however,

that it is not mandatory for students to undertake activities in all four zones; music practice areas are restricted to those who play a musical instrument and kapa haka (performing arts) practice to those who have chosen to participate (although at two of the schools the latter was not seen as optional). Although they are described as a zone, they are not always in close proximity to each other, and the zone could be more easily considered representative of the environment that the students find themselves in when in a formal education setting.

The key parts of the formal education information ground zone are depicted in the diagram underneath.

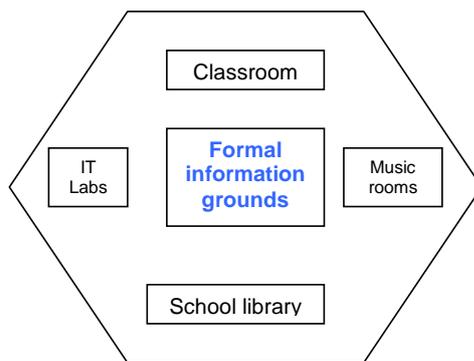


Diagram 2: School formal information grounds - zones

The casual zone is so named as it includes the parts of the school where the students are still within the school precincts but are not in formal learning situations, as illustrated in the following diagram.

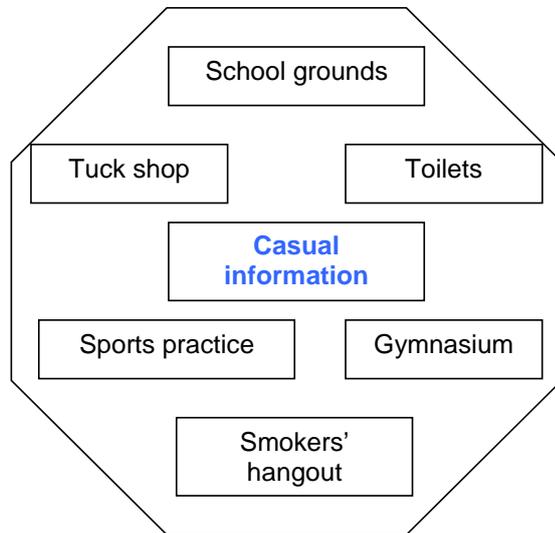


Diagram 3: School casual information grounds-zones

The boarding zone includes the facilities and areas where boarders congregate for different activities, which are a combination of casual and formal educational settings.

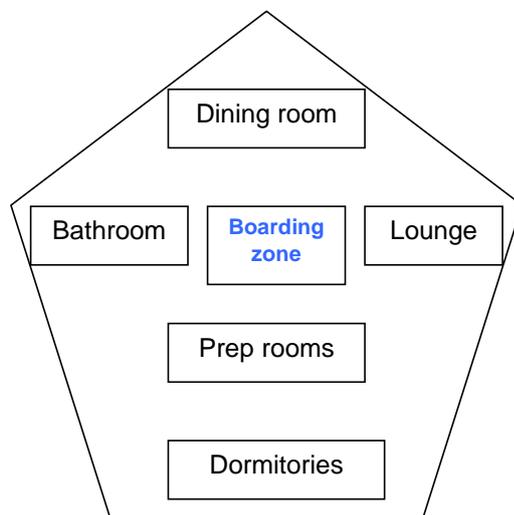


Diagram 4: School boarding information grounds - zones

The formal zones

The classroom as an information ground

Although the primary purpose of a classroom is to provide a venue for the practice of teaching and learning, it can also be the setting for an information ground. Students in every focus group across the four schools identified their classrooms as valuable places to obtain information from others, not only from the teacher in the traditional learning and teaching relationship. The focus group participants indicated that the amount and type of information collected was largely dependent on who else was there, what degree of control the teacher had over the classroom, time of the school day, subject being taught and what type of lesson plan was in action.

Classroom participants

An information sharing or information exchange experience relies on participants being willing to engage in the activity. Participants in each of the focus group interviews indicated that some individuals were more likely to be ringleaders in this practice than others. One participant identified one of their friends who was always willing to tell others about “*what was going on*” as having a “*waha nui*” (big mouth). Others indicated that there were certain people known as good sources of information, and, if they were present, they would always have information to share and would find a way to share it, even if the classroom environment was not always the best place for sharing. In order for the exchange to be meaningful, the action of sharing information requires more than one participant. From the comments made in the focus groups it was obvious that not all students engaged in this activity in class, as some wished to concentrate on the lesson, while others were not a member of the group that engaged in the information exchange. However, others indicated that, although they were not always active participants (i.e. they did not choose to share information), they did actively listen to what

others were saying, while others noted that it was sometimes impossible not to hear. Members of one focus group also mentioned that they sometimes were careful not to talk about something they did not want others to hear about, and would save it for later when others were not around to overhear it.

In larger schools it is not unusual for the make-up of student cohorts to change from subject to subject, thus leading to individuals not always being in the same class together. It was noted at three of the focus group sessions that, because of this circumstance, it was not uncommon for information to be shared throughout the day with different people. This to some extent allowed for information to be exchanged with a wider network and for that information to be added to as the day develops. One student noted that quite often they heard the same information from different individuals in different classes. This indicates that within each class there is at least one individual who has played the role of 'information carrier'. In this role, these individuals have not only carried information from one venue to the next but also from one group to another.

The time of day also appeared to have a bearing on what information was able to be shared. In one focus group there was general consensus that first thing in the morning was good, as there were always things to share that may have been picked up in the time since school had finished the previous day. One respondent in this same group said that Monday morning was possibly when some of the best exchanges were held as "*we always have the weekend to catch up on*". Members of another group at the same school believed that after lunch was also a good time, as people had been mixing with other groups over the lunch break and this provided opportunities to share new information and / or expand on the information discussed earlier in the day.

Although classroom teachers did not often feature as participants in the information exchanges, they were seen at times to have a major

influence on the success or failure of information exchanges. Their main sphere of influence related essentially to the degree of control they exercised over the class and their attitude towards idle chatter in their classroom. The more senior students in the focus groups (those in Years Twelve and Thirteen) indicated that they felt that they had more control over their classroom practices than when they were in the lower years of the school, although the odd teacher would sometimes try get them to focus less on conversation and more on the work they had to do. One of these students stated that these teachers were not always successful. Others in the focus groups said that some teachers were “*more tolerant than others*”, while others had “*no control over us at all*”. One teacher was described as being “*quite easy-going*” and regularly “*joins in the conversation if he’s interested in what we were talking about.*”

All the focus groups mentioned that relief teachers, particularly those that were not overly familiar with their school, were ‘fair game’ and were often unable to stop them from discussing whatever they wanted.

It was universally agreed across the focus groups that it was harder to find a way of being able to talk to each other in some subject classes than others. In one group this difficulty was identified as being related to the fact that, in a subject like mathematics, it was necessary to concentrate on what was going on in the classroom as it is a “*hard subject*”. The same student identified history as an easier class to talk in “*as a lot of the learning is from books and we are encouraged to talk to each other about the topic, which usually leads us to talk about whatever we want*”. At other schools, similar statements were made about subjects that it was ‘safe’ to talk in. At one school it was English, biology, economics, geography, history and te reo Māori (Māori language), while at another school the subjects were thought to be accounting, economics, history and English. Most of the focus groups agreed that at times it was more dependent on the teacher than it was the subject, as some teachers were stricter than others.

In the group that identified te reo Māori as a good class to share information in, the students revealed that this was due to the fact that, by the time you had studied te reo for a number of years, you were strongly encouraged to practice your oral skills through conversations, “*so as long as we are doing it in te reo we can talk about whatever we want*”. This student, however, did admit that some discussions were somewhat limited as her friends in her class “*aren’t all at the same level in their reo*” and other students that were at the “*same level as me aren’t part of my group of friends.*”

What makes the classroom a good information ground?

Classrooms were identified as a good place for exchanging information by the focus group participants because they contain students and friends of the same age and with similar interests. The fact that classroom attendance is compulsory for every student and constitutes the major activity at a school means those students will be with other students all day. Although some of classes attended will be with the same group of students, particularly in the early years, once a student reaches the senior years and has more subject options available to them, they are more likely to have different classmates for each subject. Although some students will attempt to remain with their favourite group of friends when they are in the same class, this is not always possible as the classroom teacher may have a preferred seating plan which does not always coincide with the wishes of the students. However, from an information grounds perspective, the teacher’s plan may actually be advantageous due to the fact that the students get access to a diverse range of information from other networks. The information exchange taking place in this environment therefore is enriched through the meeting of different information channels. As the actors in this exchange are well known in this situation, Granovetter (1982) would be likely to label them as a ‘strong tie’. However, as they are put together in an artificial manner not necessarily of their own choice they might almost

qualify as a 'weak tie'. The reality is perhaps somewhere closer to the middle ground between the two categories. This might change as students may form stronger relationships over time and become friends. If the latter should occur, this could potentially have a negative impact on the richness of the information being shared.

By being members of different information exchange networks, the information exchanged in the classroom will then potentially be shared with the actors' own networks when they come together. If this process is repeated throughout the day or week when classes meet then it is likely to result in an effect that could be described as an 'information exchange spider's web'. However, unlike the spider that builds their own web and therefore controls its development, the originator of the information has substantially less control of how 'their' information is used and who becomes privy to it.

By sharing information with others (particularly members of other networks), an individual is effectively giving up their ownership (either consciously or unconsciously) of that information. If an individual is conscious of their control (or lack of it), this can ultimately influence their decision to share or not share personal information of their own, or confidential information entrusted to them by friends within their close social network. If a 'weaker tie' shares confidential information with them, then the receiver faces an ethical dilemma: do they share the information with their network and run the risk of ending an information exchange arrangement? Or as a member of a social network are they obliged to pass it on and contribute it to the information exchange within their own group? Like all ethical dilemmas involving personal relationships, the answer lies in the value that an individual places on trust and the expectation from their fellow social network members that nothing is withheld.

Members of the focus groups also mentioned the value of classrooms for eavesdropping on others' conversations. This was made possible

through the close proximity of classroom seating and, at times, the inability of groups of students not to talk. This situation was illustrated by a student who said that she regularly “*picked up gossip*” by being seated behind two other girls who “*gossiped all through maths*”. The results of eavesdropping (whether deliberate or not) was seen as ‘fair game’ by several focus group participants, and this was reflected in the comments of one who said “*if girls don’t want the whole school knowing their business, they shouldn’t talk about it where others can hear*”. This theme was supported by others who admitted that they were always careful where and when they carried out these types of discussions around other people, “*as they could just be so nosy*”.

What type of information is shared there?

The type of information shared in a classroom varied according to who was there and the amount of freedom that students had to talk to each other. If good friends were located in the same class the information shared was more likely to be quite light-hearted in a normal conversational style. This was illustrated in the comments of one student who said “*we see so much of each other that we have a tendency to just swap information on anything that’s topical either in the school or life in general*”. Another student backed this up by saying that “*deep and meaningful stuff is not shared in class*”. When asked why, the same student stated that there was “*no such thing as privacy in class*”.

Other information shared in class included information relevant to the work being done in class. Because at times the students were able to work in small groups, they were able to discuss what they were doing and the best way to do it. The comments by focus group members revealed that there was some expectation that those students with advanced skills or knowledge in a subject area would assist the less capable classmates, and this would result in reciprocity in other subjects where the roles might be reversed. “*I help the others with calculus and _____ helps me with English*”. The same sentiments were reflected at

another school where “*we are encouraged to assist each other when we can*”.

As mentioned earlier, in each class there was a degree of information swapping going on between the networks that exist within the school. As the makeup of a number of classes varied according to subject choice, each member of a social network typically had an opportunity to share classes with others not part of the group that they would count amongst their ‘strong ties’. Interaction with these ‘weaker ties’ provided an opportunity for the information between the networks to be exchanged. From the comments made in the focus groups it was clear that the most valued information to be exchanged is in the nature of gossip. This gossip was typically about other students in the school or teachers. The value of the gossip was heightened if there is a degree of alleged illicit behaviour to it. Examples of this type of information included “*who’s sexually active, who’s broken up, and who’s in trouble*”. Other information such as “*who’s dropping out*” or “*who’s failed a test*” was also highly valued, particularly as it would explain why someone was no longer at school and what they might be doing instead or, in the case of failure, why someone had extra work to do.

Information or gossip about teachers, particularly their private lives, was also very highly valued. In response to a question about why this information was important, there were several responses which could be labelled as trivial, while some others were quite reasoned. From the comments made it is quite reasonable to conclude that the reason why the information is so valued is that, although teachers are not part of the students’ social network, they are on the periphery as they are a constant presence in their lives.

One student was of the opinion that some of the gossip she had heard about teachers was “*so horrible that it had to have been made up*”. Some students admitted that although they were happy to trade information about teachers, some of it gathered from others, they didn’t

always believe it. If someone had personally observed the teacher doing something, it was more likely to be believed, but it was acknowledged that gossip about anyone, whether it was a student or a teacher, was likely to get distorted or embellished along the way.

The school library

Although it had emerged throughout the discussions in the focus groups that students were not big users of libraries in general, they did use the school library. Although a library is not a compulsory requirement of schools, almost all secondary schools in New Zealand see them as an essential component of the school's learning and teaching programme. Most secondary schools have a school librarian and a teacher with library responsibility, although the latter is not normally based in the library.

For the majority of the respondents, their 'casual' use of the library was more likely to be at a point when they needed something, for example if it was wet at lunchtime or they needed to use the resources after school to assist them with homework. However, an irregular session in the library was normally scheduled for English or History, or they might use the library for an unsupervised study period.

What makes the school library a good place to share information in?

Students in focus groups at one school mentioned that the library was seen as a neutral territory, as the school librarian left them alone but was always available to assist them if they wanted help. Teachers normally did not remain in the library with them if they did not have to. This meant that *"as long as we don't make too much noise we can talk amongst ourselves"*. The same student commented that it was *"really hard not to laugh at times when someone tells you something that's quite funny"*.

Again, the type of participation was dependent on who was there and what else they had been up to before being in the library. As there was no need to sit in places determined by teachers or school library staff, the participants largely congregated where they wanted to. The only inhibiting factor was if there were others nearby to them whom they did not want to include in the discussion or allow to overhear the exchange of information. If at all possible, the participants would indicate that they would wait for the 'intruder' to move, or move themselves if they wanted to get on with it.

What type of information is shared there?

The type of information students tended to share while at the library varied from a trivial through to an academic level. At the more trivial level, conversations revolved mainly around gossip that they had picked up from others or detected from their own observations, and things they had picked up from others in class such as what they did last night, what was for lunch or dinner, who had to see the nurse or why someone was away. The exchange of this information and degree of candidness in sharing was largely dependent on who else was present and, if they were an 'outsider', whether they could be trusted. If the 'outsider' was a member of another network, then it was entirely possible that they would bring something to the information exchange and would in turn expect to receive some information to take away and share with their network.

Conversations at the more academic end of the scale tended to focus on particular problems that individuals are having with their schoolwork. They included seeking advice from someone that might know how to resolve it or, if students were working on a project as a group, exchanging information about different resources they had gathered to assist them with the project.

Students in one focus group talked about how, if they are in the school library, that they "*talk about resources that are interesting*" or "*books that*

we have read and enjoyed". These students, however, appeared to be a minority rather than the norm, as discussing library-focused activities was not a feature of any of the other focus groups.

Information technology laboratories

Information technology laboratories are now a common feature at most secondary schools. The laboratories are largely used for classroom instruction and are also generally available for student use during breaks, and before and after school. As they are in the domain of the school they are generally strictly administered or supervised. Principal reasons for gathering in the laboratories are to complete homework, search for information, and use the printing and email facilities. Like many of the other school facilities, it is highly likely that the labs will always have a mixture of individuals gathered there during common break times.

Students in the focus groups indicated that computer labs were not always available as an information ground, because the mixture of ages and the restricted spaces meant that they were not always able to undertake the conversations they would wish to. Occasionally, however, information exchanges would take place with people they did not know so well.

What type of information is shared there?

The main focus of the technology suite is to use the equipment to either write up assignments, check email (where available) and to search the internet for information to assist with school work or for recreational purposes.

The information exchanges, when they happened, were normally related to difficulties involving software and / or hardware problems, and web site issues.

All four schools involved in the research study had an internet filtering system in place that restricted the access students had to non-approved websites. Although searches were able to be conducted on search engines such as Google or Yahoo, web pages of interest amongst the search results were frequently unavailable as they were blocked by the filter. Focus groups at all four schools expressed their frustrations at not being able to connect to these sites. However they also highlighted the fact that when they did manage to find a site of interest that was not blocked, they would often share this with their friends and other people in the technology suite with them. A student said that the reason for sharing this information quickly was because "*there is no guarantee that it [the website] would be there next time*" as it would probably be blocked.

Students who were known as 'computer nerds' were sought out for assistance by those that were less able. The information exchanges that occurred within these relationships was more of a one way transaction like in the tuakana-teina (mentor-mentee) model. In some senses, the power in these relationships was the reverse of the normal situation that these individuals find themselves in. This was explained by participants in one focus group as a special arrangement; "*we don't normally talk to them because we have nothing in common with them*". However, in situations like this it was clear that the need for assistance outweighed normal circumstances and led to the experts "*helping us get our assignments sorted out*". The only 'computer nerd' identified in this focus group was asked why he would help other students that normally would not even talk to him. His reply indicated that he liked helping others and it was more a case of self-satisfaction than anything else; "*I don't mind helping others as in a way it shows them how good I am*". The same student also said to me later on, out of the hearing of the other focus group members, that he could tell his friends about what he had done and for whom.

The students not only shared information about computing and technology in the IT laboratories. There was also a tendency for the laboratories to be a place where students talked about what they had learned in class, what gossip they had picked up, or what was happening that night or the next day. In some senses the indication from the students was that the laboratories brought together individuals and groups from different strands. At times information would be shared within regular networks and between networks, with the latter exchanges being less deliberate and more accidental. This was largely due to some groups being noisier than others and their exchanges being overheard, as illustrated in the following comment from a student in this situation. *“I often hear things in the lab that I’m sure I shouldn’t, but I find that if I look busy that people will just keep talking”.*

What makes the computer labs a good place to share information?

Although the suites are typically arranged in individual carrels that discourage interaction between users, the very nature of the work being undertaken promoted discussion, particularly if individuals were having an issue with the technology they are using. Although not designed for group work a student commented that, as they often had to complete group based projects, they would have to meet as a group in the lab to *“sort out what should be included and how to lay it out”.*

One of the main reasons for the suite being a good place to share information was because *“there are always others there”.* Other students commented that they were often in there after school and, when it was unsupervised, they would *“just talk about stuff”.* Another student said that *“it is a great place to gossip with others because it’s not like a normal classroom”.*

Music practice rooms

For students learning a musical instrument, time and space for practicing is vital to ensuring that the learning process is successful. Practice rooms can vary in size according to the type of instruments being practiced, and the priority placed on music and culture at the school. At one school the music practice facilities were identified as quite limited as the students practicing had to negotiate for the use of one space, and that this was not always satisfactory as some individuals tended to treat it as their own personal studio. Although individuals could share the room this was not always conducive to success, as the instruments being practiced were not always complementary and / or those that might be able to go together could not due to the different skill levels of the individuals involved.

What makes this a good place for sharing information?

In the focus group at this school, the student who identified the music room as a place where discussions took place said that just as much, if not more, discussion took place outside the practice room as people waited to use the facility or waited for their friends to finish. As the practice room at this institution was separate from other parts of the school, the students that did congregate there normally had a strong interest in music and therefore had much in common with the others who are there. This common interest would generally lead to impromptu exchanges with fellow music enthusiasts, regardless of their age, gender or year group status.

What kind of information is shared there?

As most students gathered there had a common interest in music, the main focus of the information shared was related to this interest. Some of the information shared that was identified by focus group participants included: "*helping each other with notes or chords*", "*laying and talking*

about a new composition”, “practice times”, “talking about concerts and competitions” and “showing off a new instrument”.

The music practice area was one of the few areas in any of the four school areas that did not have gossip as one of integral information sharing activities. When asked why they do not gossip at music in the same way that other groups do when they gather, there was a mixed response. One student replied that she and her friends were “*too busy to gossip*”; she also stated that there were plenty of other places she “*could pick up gossip if she wanted*”. Another student said that “*she just wasn’t interested in gossip*”, while another knew to “*mind my own business*”.

The casual zone

The casual information ground zone is characterised by the fact that, in these zones, students are not engaged in formal educational practices. In most cases, although there is an element of pre-determination, their presence in these areas is largely voluntary.

School Grounds

Although the amount of space varies from school to school, all secondary schools in New Zealand are fortunate enough to have substantial areas within their precincts for students to use before and after school, and during common break times. Although these grounds must be shared with other pupils at the school, they become highly valuable venues in themselves for information sharing and exchange. Due to the vastness of space, it is not unusual to expect that several information grounds are in operation at any one time, as participants prefer to mix with their own social group.

Focus group participants indicated that on the whole they were 'creatures of habit', in that they tended to mix with the same people each day and normally met up at the same spot. If for some reason they were unable to meet there (such as rain), they would switch to somewhere appropriate. However, it was stated by one participant that this latter situation normally resulted in a tendency to be less inclined to have a full and frank exchange due to the fact that there was no guarantee of privacy. The other aspect of the school grounds is that, at the time that the students are there sharing information, they are also normally undertaking a variety of activities.

What type of information is shared there?

Some students indicated that they used these breaks in different ways, with the morning break only being a chance to have a quick catch up with each other, talk about what has been going on in different classrooms and catch up on anything that happened the previous day (especially if they had not all been in the same class in the first couple of hours of the school day).

At lunchtime, discussions were more likely to be far wider and the activities being undertaken more varied, ranging from reasonably passive discussions while sitting to being physically active by way of a sport or a game.

Students participating in activities that can be described as less active indicated that this was normally out of choice. A group of students in one focus group said that if at all possible they would work on their homework and "*help each other finish what we can*". This was often achieved through "*us doing something [homework activity] each and then swapping the answers*".

A student in another focus-group said that her group did not play sport "*but just like to talk about different things*". When asked what these

'things' might be, she admitted that it largely depended who was there but "*it is mainly based around gossip, TV shows, music and clothes*".

The focus groups also contained individuals that liked to play sports at lunch times and that sometimes this meant they did not always have time to talk. However, at other times they talked about "*who we are playing this weekend and whether they're any good*". Sometimes the discussions revolved around "*who has been picked for the team and who hasn't and why*". Occasionally information was passed on from one of the group about how to perform or improve different skills, with them taking on a role more like a 'coach' or a 'tuakana'. Situations like these depended on who was there as "*not everyone in the group stops and listens*".

The gymnasium

Although higher year levels in secondary schools are not normally timetabled for physical education, students did find themselves at the gymnasium at odd times. These occasions normally related to when they were undertaking some physical activity, or an exercise programme with weights or other fitness equipment. Depending on what activity they were undertaking and the degree of concentration required, there was always scope for chatter and the exchange of information with the others gathered there. Two students in the same focus group agreed that, although it was possible to arrange to meet people at the gym, you could not always control who was there, and you could end up sharing the facilities with other year groups and the occasional teacher. This was particularly true if students were there before or after the school day.

What makes the gymnasium a good place to share information?

One advantage of the gymnasium was that individuals were normally there for similar purposes. Depending on what activities these individuals were doing there, their presence at the gym could be regular

or irregular. If regular, it was more likely that the activities were organised and therefore it was probable that those they were interacting with were either members of the same team or participating in the same sport (in another team).

Those who used the gymnasium in a less structured manner (i.e. less frequently or just as frequently but at irregular intervals) added an element of unpredictability to the information exchanges.

Although information could be exchanged in the process of practicing sports, some of the richest exchanges came when different groups of users came together in the same space. One area where this occurred was in the weights room where users of the equipment could come together, with teams present at the same time as other users. More users in the room could quite often mean that information was exchanged while waiting to use the next piece of equipment. A similar situation occurred in the changing areas, where gymnasium users were changing before or after the particular activity they participated in or were waiting to use the showering facilities. It seems that, even though people find waiting in queues frustrating, they were a natural location for an information grounds to occur as people were likely to strike up a conversation with those standing next to them.

Toilets

Every person at school at some time during the day needs to use the toilet, and arranging to all meet in the same toilet block is hard to organise unless it is prearranged for one of the common breaks. Although it is possible to leave class to go to the toilet it is normally at the discretion of the classroom teacher, and this is not always forthcoming. Milling around in toilets is not encouraged at most schools as it can cause congestion, can be deemed to be unhygienic and unhealthy and is not really deemed to be an appropriate place to congregate (especially if someone is eating). However in every focus group, toilets and toilet

blocks were identified as being a place where information is shared and exchanged.

What makes it a good place to share information?

It was noted that in the toilets for females there were never enough cubicles to meet the demand, particularly at morning tea time, and this led to queuing for the cubicles and the wash basins. While in the act of queuing conversations were held and, although at times these were only between individuals who were friends, occasionally they were between people who were not members of the same group of friends or social network.

Male students were less likely to have to queue unless there was a demand for cubicles. If they were there to simply to use the urinals, the amount of time they spent in the toilets was relatively brief and, although some information was exchanged, it was normally quite light and casual rather than deep and meaningful. However it was noted by several of the male respondents of the focus groups that these conversations could sometimes continue beyond the precincts of the toilets. This was dependent on the topic of the conversation, the participants involved and how much time was available before they had to be somewhere else (such as the next class).

Students in one group noted that the toilets were “*safe from teachers*”, and that they could carry out conversations there about teachers and “*things we wouldn't want them [teachers] to know about*”.

Outside the school tuck shop

Most secondary schools in New Zealand have a school canteen and these are colloquially known as the ‘tuck shop’. This shop normally sells food and beverages to the staff and students of the school, suitable for consumption on the school premises. As such the tuck shop is a space

where individual students are likely to congregate and queue to buy their morning tea or lunch snacks.

What makes it a good place to share information?

Students at only one of the schools mentioned that outside the school tuck shop was a good place for them to share and exchange information. For the students who mentioned it, it was a natural gathering space for them. This was because there was a specific need that was being fulfilled (food purchase and consumption), and students not only had time for sharing information but also had a natural inclination to share resources, pool money and buy items that they could consume together.

As a gathering and selling point, the area around the tuck shop is busy and the queues to purchase items quite long. In one focus group, the participants indicated that they would share responsibility for standing in line to purchase items while the other members of the group protected their 'space'. As a result, participants in any one social interaction and information exchange could vary from day to day depending on whose turn it was to be in the queue and who was looking after the space. This could affect the quality of the information being exchanged, as the most valuable participant could be the one standing in the queue rather than with the group. However, it was also recognised that some members of their social group were much better than others in eliciting information from others while they were standing in the queue, so the information they picked up while fulfilling this task could be useful when they return to their social group.

What type of information is shared?

There was a strong tendency for conversations around the tuck shop to focus on food, including its cost, best value for money, and tastes. The other focus of conversation was gossip about others or what had

happened in their classes or assembly that morning, particularly if someone had been asked to see one of the senior staff.

Someone else's trouble was often a strong source of gossip and information exchange throughout the whole school as "*we want to know what they have done wrong and what's going to happen to them*". If the person in question or one of their friends was there "*we will try and find out from someone that knows them*". This may lead to some form of reciprocal information exchange between two individuals or groups, or an expectation that the favour will be returned at a later date.

Information was also often exchanged with other students who had either already purchased their food or were in line, about whether anything special was available or whether things had run out. This was particularly useful as "*if we don't have enough money we will either have to buy something else or try and borrow some of some one else*" [like another friend].

The smokers' hangout

Although smoking is not an approved activity at schools, it does occur. At most schools there are places where those wishing to smoke will congregate with a view of not being detected by teachers. This results in clandestine gatherings of students of all year levels at various points during the day (before and after school, lunchtime and during other breaks).

What makes it a good place to share information?

As a gathering point the 'smokers' hangout' not only serves as a venue for flouting the school rules but also serves a number of other purposes. As the students who gather there become well known to each other they become part of a social network that would in all likelihood not exist if it

was not for the common activity they are partaking in. Although those they gather with might not be part of their normal network of contacts in the school, their mere presence places another layer of communication into the pre-existing networks within the school.

Although some of the discussion at the 'hangout' mirrors other information exchange activities in the school, it is one of the few places that pupils of different ages congregate. As the participants are from different year levels the 'hangout' is a place where several information channels come together and information is exchanged while smoking occurs.

What type of information is shared there?

Like many other 'information grounds' within the school precinct, the information exchanged revolved around school activities, personalities and gossip. The content of these exchanges always had the potential to be more rewarding than others within the school, as those present from the different year groups would be able to make contributions from their respective groups. This information otherwise would not always be available to them all and provided a rich vein of information that they could disseminate to other social groups they were part of.

Other information shared in the hangout was related to the act of smoking and included "*shops where under-age smokers can safely buy cigarettes from*", "*what happens if you're caught smoking*" and practical tips such as "*how to stop smelling like an ashtray*".

Sports practice

Every New Zealand secondary school fields teams across a range of sporting codes. The more popular sports include basketball, cricket, football (soccer), hockey, netball and rugby. Entry into the elite teams fielded by schools is highly competitive and places in these teams are

normally held by the senior students. However, selection into these teams is based on merit and it is possible for some students from the earlier year groups to be included. Schools also typically field teams in lower and social grade competitions. Every team fielded by a school has a practice at some stage during the week, with some of the elite teams sometimes having multiple practices. These practices are typically held after the school day has ended, but some teams also fit in practice during the lunch break. In truly exceptional circumstances the school will allow a team to practice during the school day (but this is highly irregular). Every focus group at every school identified sports practice as a place where they exchanged information with their team mates, friends and peers.

What makes this a good place to exchange information?

Sports practice is a regular activity and will be normally held at the same time and place every time it is scheduled. With this regular time slot established, students will typically know who will be present thus resulting in a pattern.

The most opportune time for this information exchange to take place was before and after the sports practice. This was due to the fact that some coaches of the sports teams did not condone any frivolous discussion during the practice sessions. However, it was noted that students in some lower teams did not have an actual coach, and the training and practice sessions were not always as focused as they could be. This could lead to quite robust discussions being held by those present at times. For the more serious teams, it was noted by students in four different focus groups that they needed to wait for the time after the practice when the players were getting changed or preparing to go home.

What type of information is shared there?

Like most other 'information grounds' around the school the types of information being exchanged was about individuals, social lives and school work. However, of particular value was the performance of other teams and the strengths and weaknesses of the team being played next. The latter was normally sought from people in other teams who had already played them, or were in representative trials or in teams with them.

Timing of discussions was sometimes delayed on purpose to ensure that not too much information was spilled in front of the coach, particularly if they did not want their coach / teacher to know what they were up to (especially when discussing their social lives). One student stated that if they waited until after practice to talk to the friends in their network, they quite often had more to discuss as they were in different teams and sometimes "*we will pick up some gossip from our team mates and we can pass that on*".

Self-coached teams (some only had a manager), would use practice as a means of ensuring that the team had a full contingent of players and to make sure everybody knew where the weekend's game was to be played. There was also a learning element to some of these team practices, whereby focus group members stated that they would "*pass on new moves to the other players*".

The boarding zone

The boarding zone, although it is very much a part of the formal school structure for the students who live there, is entirely representative of another sub-culture within the school. Although most of the participants within the zone are the same as those that participate in the formal and casual zones, the dynamics are different. This in part could be attributed to the fact that it is one thing to learn and play together in the formal and

casual zones but living together adds another entirely different dimension.

The dining hall

Dining halls are an essential feature of schools with boarding hostels. These are the focal point of hostel activity at least three times during the day, and as such become very much a part of the 'information flow' within the school. The dining hall brings students from all year groups together in the one venue at the one time. Also in attendance will be hostel staff and sometimes members of the school teaching staff. Although all year groups are present, it was normal for the students to sit at tables with their fellow year group members rather than mixing with other year groups. One senior student declared that "*senior students do not let junior students mix with them because they have not earned that right*". When asked whether this also applied to younger siblings the answer was a definite "yes". This same student noted that she would share and swap information with her younger sister but this was only occasionally and not a regular occurrence, and "*certainly not while her friends were present*".

The other area within the dining room for discussion and information exchange to occur was when students are queuing for their meals. It was noted at the two schools with boarding hostels, however, that the conversation in queue between two or more individuals from different year-groups was more likely to be started by the more senior pupil rather than a student from the lower years, unless the individuals involved had a pre-determined relationship such as being members of the same sports team or the same cultural group.

What makes the dining room a good place to share information?

Over the period of three to five years that students are in the boarding establishment, the dining hall becomes a focal point for meeting, eating

and talking to their friends. As the meals are served at set hours each day, the students can develop a regular pattern of engagement with each other. This pattern includes arriving and queuing at the same time, and sitting at the same tables at each meal.

If the students had been attending different classes, sports practices or games, or had an external trip, the dining hall provided an excellent opportunity to exchange information that had come from different information channels. Focus group participants at the two schools mentioned that their respective dining halls were relatively noisy with the sounds of eating, talking and laughter. The participants indicated that the noisy environment helped to mask their conversations, particularly if they were talking about others.

As student habits in the dining hall are predictable, it was seen as a convenient venue for catching up with students for a quick conversation. This type of transaction typically took place at the table of the individual on the receiver's end rather than the initiator. The only exception to this appeared to be if a student from a lower form level was summoned to the senior student's table.

The queues also provide an opportunity to talk while waiting to be served and, although it is not normal for the different year levels to talk to each other, this did occasionally occur through proximity and, as one student commented, to stop "*boredom setting in*".

What type of information is shared there?

The type of information shared in the dining hall was very dependent on what time of day it was. Examples of the information shared at breakfast time included "*anything special on today*", "*radio news items*", "*who's sick*". One student commented that they were not "*a morning person*"; when asked why this was relevant, the reply was "*I normally just listen to others*".

Lunch and dinner times were more likely to be noisier than breakfast, and the information shared varied enormously depending on what classes students had been in during the day and whom they had spoken to. Examples of the type of information being shared included “*who’s got detention*”, “*who gave a really dumb answer in class*”, “*what teacher is away*” and “*who got what [grade] for their home work.*”

Dinner time is normally after sports practices or after-school excursions (to the doctor, dentist, town etc.). Students who have participated in these activities either shared information or were the topic of conversation for others. This included “*who is in the team for Saturday*”, “*who hurt themselves*” [at practice], “*what’s wrong with ___*”

The students also indicated that they traded information about TV programmes, homework, movies, websites, books, music and general gossip about others at school.

Prep (homework) rooms

An essential part of any secondary school student’s learning plan is the assignment of homework. As a student progresses through to their senior years, the amount and difficulty of the homework gradually increases. The schools that have boarding establishments set aside time every weekday after school for their students to complete their homework in a supervised environment, and normally it is compulsory for all students to attend this. The only exceptions to this are if the student has another commitment such as sports practice, or a medical or dental appointment.

What makes ‘prep’ a good place to share information?

As senior students are usually trustworthy and self-motivated, it is not uncommon for them to be left to do their homework in a mostly

unsupervised environment. When this occurred it was also not unusual for these students to break into conversation and to swap information with each other. Even if supervision was present, it was possible for this exchange to continue, particularly if it was related to the schoolwork that the students were doing.

A student in one of the focus groups at one of the boarding schools said “*it can become quite noisy as everyone has an opinion on what something means*”. Homework seemed to one of the acts that aided information exchange between groups and individuals that did not normally engage with each other. For the senior students this appeared to be part of the principle of reciprocity, that people would help if they knew and in return they would be assisted when they required help.

At various times some senior pupils might be asked to assist in the supervision of junior students and, although it was unusual for information exchanges to take place between the different year groups, prep rooms were one place where this was the exception rather than the rule. This normally arose from the need for the senior pupil to assist a junior with an aspect of their homework. In this context the exchange could be viewed as a practical application of the tuakana-teina principle, where the tuakana (senior) assisted the teina (junior) with their school work in a mentoring type role. One student commented that “*it is part of being here....., as a whānau we need to help others when they are having [academic] problems, just like we were when we were juniors*”.

Dormitories

Sharing with others is an intrinsic part of being at boarding school; nowhere is this more evident than in sharing sleeping quarters with students from the same year and age group. Learning to live with others can be a challenge for individuals, particularly if they are expected to be in the same class all day as well. However, the dormitories are a place where information comes together from different networks.

As boarders progress through their years at the hostel they become much more conscious of whom they wish to share rooms with and can normally negotiate this with those in charge of the hostel. Over the years, the bond between the boarders in the same year group is likely to become much stronger, and this is reflected in the comments made by one student who said *“the hostel is a whānau and we look out for each other when awhi [assistance] is needed and I think we will be more than just friends for life”*. Students in another focus group reinforced these sentiments by agreeing that their friends in the hostel were much more like sisters and, as such, the things they tended to discuss were more personal in nature than they would normally talk about to people who were not close friends. The same focus group stated that the conversations and discussions they had in the hostel were more inclusive than the conversations they held during school hours. When asked why, one student responded that at times *“it is really hard to be discreet during school hours”* and consequently this would lead more *“one to one discussions”*. Another student pointed out that in the hostel *“there is not much in the way of privacy”* and that *“sometimes during the day you just need to escape into a corner with your best friends”*.

What type of information is shared there?

The information shared in the dormitories varied enormously from the mundane day to day issues, gossip and other trivial matters during normal term times. Most of this would be information that had been picked up during the day, and sometimes would result in the trading of what different people knew about the same story / person / event. At other times the dormitories were a hive of activity as something special was going on, such as a social or recreational outing, and schedules and needs would be discussed, as well as *“who else is going”* and *“what everyone is wearing”*.

Another example of a special time was the beginning of a new term or after a holiday break, where the dormitories became quite lively as “we like to show off our new clothes and shoes and share information about prices, sales and styles”, “we talk about what we did over the holidays”, “who’s not coming back”, “what our friends are up to”, “our families” and “what we got in NCEA”.

Bathrooms

Sharing bathroom facilities with other boarders is another feature of life in a school hostel and, like the information grounds found in school toilets, the shared bathroom facilities invariably leads to students waiting for their turn to use them. These areas were identified as a place where information exchanges took place in all three focus groups held at the schools with boarding facilities. The type of information exchanges taking place again largely depended on who was present and what time of the day it was. The times of the day that were busiest in these facilities were the early morning (prior to breakfast and the school day), after sports practices (late afternoon) and later in the evening (prior to bed time).

What makes it a good place to share information?

Like many of the other information grounds in the school and the hostel, the bathroom is a place where people need to congregate and occasionally have to wait. It is in these circumstances that those waiting for their turn started to discuss and exchange information, and these discussions could continue when they got their turn to use the bathroom facilities. However one student commented that they did not discuss things in the shower as “it’s hard to know who else is in the room”. The students in the focus groups indicated that these conversations would often also continue after the participants had left the room.

What type of information is shared there?

Information exchanges in the morning centred largely on the day before and things that were supposed to occur in the day yet to come. After sports practice, the exchanges would largely focus on what had happened at sports practice, including “*who was in*” and “*who was out*” [of the team], or whether “*anyone had been injured and how it had happened*”. The evening discussions in the bathroom ranged widely from what had happened in a television programme through to conversations about schoolwork, other schoolmates, members of the opposite sex and what was wrong with someone (who was not well). It was noted that the “*conversations are normally quite lively and involve lots of teasing and laughter*”.

Lounge area

Lounge areas in hostels are quite relaxed places and can often see members of every year group represented, particularly if popular television programmes are on. As the lounge room is one of the few places where hostel students may view television, this gathering might happen on a regular basis, and more frequently on the weekends when movies and sporting fixtures are screened. The lounge is another information ground where students from different years and age groups can engage freely with each other, although one student stated that junior students still “*took their cues from the older students*” and waited for them to spark the discussion rather than initiating it themselves. When asked why, the respondent explained that the main reasons were “*self preservation*” as well as “*if you keep quiet the others there will quite often talk amongst themselves and sometimes it is a good way of learning things*”. This respondent elaborated further by saying the “*key to survival is not to look too interested*”.

What type of information is shared there?

Students in the focus groups identified that conversations about television programmes and celebrities were normal topics for discussion in the lounge area, and several students stated that the lounge was a good place for *“getting help with homework problems”*. The news was often a topic of discussion, particularly for those who missed the headlines or were concerned about having missed the weather forecast. With regard to the news, a participant who describes themselves as a *“self confessed news junkie”* commented that they would quite often *“get asked whether they know anything else about a news story”*.

Like many of the other information grounds, gossip about other pupils, teachers and hostel staff was rife.

What makes it a good place for sharing information?

The lounge area is typically an area for relaxing, watching television and chatting. As a space it provides an area separate from the dormitories where the different groups in the hostel can gather together, and as such becomes a neutral territory where information can be exchanged.

It was noted in one of the focus groups, however, that the degree of information being exchanged would depend very much on who else was there and how easily their conversations could be overheard.

Discussion

The information grounds at school in their various manifestations provide a rich vein of information. Although three distinct ‘zones’ have been identified, it can be seen from the activities and information exchange practice occurring in these zones that there is a high level of overlapping information. This can be attributed to the fact that the ‘actors’ are essentially the same across the zones. The overlap is more apparent in

the two schools with boarding facilities, as the participants in the information grounds zones are effectively the same group of people.

The two schools without boarding facilities experience a degree of overlap in information between the different zones, however they also have an opportunity to have a more diverse range of information being exchanged. This is mainly due to the participants living in separate households, thus exposing them to a wider range of information experiences that can be exchanged when they come together in their zones at school.

The transmission of information across the three zones identified within the school precincts is largely due to the role played by 'information carriers'. In the information seeking behaviour literature (Agada, 1999; Metoyer-Duran, 1993; Shoemaker, 1991), these carriers are more likely to be identified as 'gatekeepers'. As carriers, they assume responsibility for taking information from one information ground to another; as gatekeepers they can decide what information is worthy of sharing or of likely interest to those whom they choose to share it with. Depending on the number of information grounds they are involved with, it might be that carriers choose to vary the information they share with the different groups that they are part of. Their motivation for acting in this manner is also likely to vary, however one can assume that such reasons could include not betraying the confidences of close friends, maintaining reciprocal obligations with other participants, keeping control over the dissemination of information and, in some groups, behaving more as a passive participant by receiving information than spreading it.

Across the six focus groups there were participants who displayed one or more of these characteristics. These individuals made significant contributions to the exchanges within each focus group, with a tendency to lead the direction of the discussions taking place during the sessions. Although many of the other participants were not 'shrinking violets' when

it came to the discussions, it was clear that those individuals identified as carriers had an extra dimension to them, best described as charisma.

The range of information shared across the school zones is relatively limited in that it focuses heavily on personal information, and gossip about other members of the school community and their families. Gossip within this context is highly valued. Other gossip is centred on well-known individuals in the wider community, such as television personalities and celebrities. Although some people do not approve of gossip, to teenagers and others who engage with it, it fulfils a basic human need of knowing what is going on in the lives of other people, whether or not they are personally known to those discussing and exchanging the information.

Although celebrity gossip is most likely to be sourced from magazines, newspapers or television, its value lies in its ability to 'normalise' the lives of the rich and famous. Information obtained about 'celebrities' gains in value when individual participants are able to provide information that they have observed first hand.

However, gossip is not the only information that teenagers choose to share. More serious topics are exchanged, but these discussions are dependent on the right individuals being present at the right location at the right time. This is illustrated in the example of the exchanges that take place in the computer laboratories, where the successful exchange of information relating to a technology issue is dependent on a student having a problem and a 'computer nerd' being present to assist them. Another example of this is where privacy is identified as being crucial to exchanging information with a close friend. This is particularly important when the person sharing the information does not want others to eavesdrop or overhear personal information about them, family or friends. In cases such as this, it is more about exclusion rather than inclusion of others.

Exclusion also emerges as a theme in other aspects of the focus group discussions and primarily focuses on the composition of social networks. At school, social networks evolve over time as the students become more familiar with each other and friendships develop. Some of the networks could have developed over a longer period, particularly if a group had been at other schools together. At secondary school level a hierarchy of social networks is quite normal. These hierarchies vary, but some common elements that appeared across the four schools studied were year group and age. However, being the same age and in the same year group did not always result in the formation of a social network of all students in that category. Further demarcations within age and year group levels are likely to be based on the sharing of similar interests or backgrounds. An example of this is where a social network at one school consisted of girls that were highly active and interested in sport, whereas another group consisted of girls that were more academically focused. Members of these two networks were frequently in the same classes together but chose to move in different social groups outside class. While in class, depending on the type of information in question, members of the different networks may or may not discuss and exchange information with each other.

Conclusion

This chapter has provided substantial detail about the importance of school, not only for educational purposes but for the development of social networks. As the evidence has demonstrated, these networks play an instrumental role in the exchange of information. Although each of the schools had their own unique features, the types of information grounds found in all four were very similar, with the notable exception being the differences between those with boarding establishments and those without.

The analysis of the data contributes to our knowledge of how Māori secondary students make sense of the world. From the data, three key discoveries have been identified. The first discovery was the fact that these students seek new information by asking other people. The person or people they ask is dependent on which of the three zones (formal, informal or boarding) they find themselves in, the type of information they want and who else is present. If the student is in a formal zone such as the classroom and requires assistance with their study, they will typically ask someone they know can help them, either a teacher or a fellow student (not necessarily a friend). Information seeking of this type can be viewed as being one of convenience.

When it comes to the exchange of information, the level of activity is highly dependent on where it is taking place and with whom. Although there was some exchange of information that was curriculum or education focused, it became obvious through the analysis of the data that this was not what interested the students the most and therefore was not given much weight in their exchanges. The data did reveal, however, that the main focus of the exchanges was either everyday life information seeking topics such as health, or information exchange that revolved principally around gossip and trivia.

The next discovery was the presence of a distinct notion of inclusion and exclusion in information exchange behaviour, whereby members of social groups ensured that the information they shared stayed within their circle of influence and that they would shut down discussions to stop others from participating or overhearing the information they were exchanging. This was deemed as being particularly important in situations where information that was personal to the social group members was being discussed; failure to protect this information was seen as a 'licence' to broadcast the information to other groups in the school and beyond. This code of inclusion / exclusion applied particularly to the relationship between different year groups, where even if there was a family connection (sibling or cousin) between the two

groups, information was not shared frequently with the other group unless at least one of the groups (normally the older group) felt there was an advantage in doing so. There was, however, a notable exception to this in the form of casual information grounds such as those found at sports practice and the place where smokers congregate, where the normal barriers between different year groups are set aside and information is shared and exchanged.

The third point of discovery was the recognition that students were making use of Māori values in their interaction with each other during the focus group discussions; although these values were not always spelt out, it was clear that the groups had clear ideas of how their fellow group members should behave and what their responsibilities were to each other. An example of this was the whakamōwai (humility) value, where focus group participants were careful not to talk themselves up too much for fear of getting teased by their peers. Another value that was obvious in the sessions was that of tautoko (support), where participants backed each other's opinions up and encouraged others by providing examples that they thought were relevant to the discussion and suggesting that their friend elaborate further. As there was much laughter in the focus groups, the rēhia (enjoyment) value was important and appreciated by those present.

While this chapter has shown how important networks and information grounds are to the sharing and exchange of information in a school setting, whether it be for educational or social purposes, Chapter Six will further explore the importance of social environments for sharing and exchanging information.

Chapter Six

Social information grounds

The previous chapter introduced the role that social networks play in the information world of Māori students while they are at school, and the three zones in which information sharing and exchange take place. Chapter Six investigates the information sharing and exchange that occurs when Māori secondary school students gather in a social setting outside of school. These social settings will be defined, the types of individuals who gather there identified and the nature of information that is exchanged at these places will be discussed.

Meeting friends and acquaintances in social settings outside school hours is a normal activity for children and teenagers alike. In their earlier years these social engagements are more likely to have been organised by their parents or caregivers and are highly likely to be supervised by an adult or an older sibling of one the children participating. In their later years (when they reach their teens) the social engagements are more likely to be driven by the teens themselves, preferably with no adult supervision present. The age at which these social engagements start to take place will be largely reliant on the attitudes of parents or caregivers towards allowing their children to be relatively independent. Another factor that affects a student's ability to mix and socialise with others is their degree of popularity amongst their peer group. Unpopular students are less likely to be invited to any social gathering place by those meeting there, unless there is a special reason for them being there. One of the other limiting factors in determining who will be present is whether the student is a boarder or not. Students at boarding schools wanting to participate in social engagements normally require permission from hostel supervisors to leave the school precincts. This may involve an agreement to comply with any curfew imposed, or to be checked out

on weekend leave and be the responsibility of the adults in the whānau (extended family) they are checked out to.

The theory of information grounds that was developed by Karen Fisher (1999) identifies that their existence plays a role as an information exchange point as a by-product of social interaction, leading to a range of formal and informal information sharing. Another theorist of importance to this study is sociologist Mark Granovetter (1973, 1982), who wrote about the concepts of strong and weak ties. Granovetter's theories identify 'strong ties' as people who an individual has a close relationship to, who are part of their social network and a participant in the same social world. A 'weak tie' is someone who might be known to an individual but is not within the normal gamut of their information world. Granovetter maintains that the information obtained from 'weak ties' is richer, in that it is new information to the receiver's social group or network.

Meeting with peers or friends in a social environment and exchanging conversation and information is in keeping with the Everyday Life Information Seeking (ELIS) theory developed by Savolainen (1995), which focuses on the information seeking that people employ to "orient themselves in daily life or to solve problems". Savolainen's ELIS theory has been applied to many different studies, but very few of these studies have focused on teenagers who are meeting in social contexts. Those that have are the studies by Julien (1999), focusing on adolescent career information seeking behaviours, and Agosto & Hughes-Hassell (2006), looking at everyday life information needs of urban teenagers.

The study by Julien revealed the preference of adolescents to seek information from other people, including family and friends, to identify future career prospects. The Agosto & Hughes-Hassell (2006) study demonstrated that ELIS is part of a teenager's toolset for exploring their understanding of themselves, the world that they are part of, and how they fit into that world now and in the future.

Identifying the social information grounds

Participants in the focus groups were asked to identify places outside of school where they congregated with others and where they might share information with those who were gathered there. There were a wide range of places identified, with the main areas being shopping malls, food courts (another more specific area normally found at shopping malls), “downtown”, sporting fixtures, parties, church and cafes. Another place that was identified was the marae (Māori meeting place), but was not included as it is covered in the chapter on cultural information grounds (chapter 6).

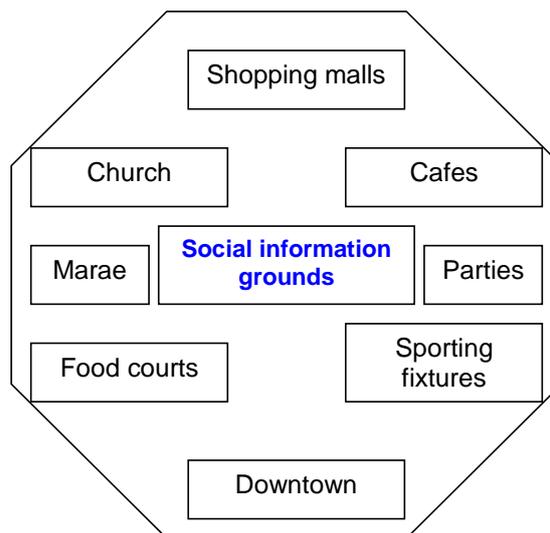


Diagram 5: Social information grounds - zones

Apart from the parties (more likely to be at an individual’s house), all these venues are in public places and are therefore easily accessible to those who want to gather there.

Although these information grounds are found in public places, like the information grounds identified by Fisher and other researchers, they are temporary in nature and are reconstituted every time the social group comes together. As the social group meets mainly in public places, it is

not always guaranteed exclusive rights to these gathering places, as other social groups may have already assembled there. Members of the social group therefore need to exercise some flexibility when planning to meet at their preferred locations, as an alternate meeting place might need to be identified.

Describing the locations

Shopping malls

Most cities in New Zealand have at least one shopping mall, containing a variety of specialty shops and nationwide chain stores. Within these malls are areas where individuals can meet and spaces large enough for groups to congregate. Participants in the focus groups identified shopping malls as being good places to meet as they are 'busy', open a specified number of hours, are brightly lit, warm and relatively safe. The four schools involved in the research study are not close to each other, however they are all within easy travelling distance of the same mall. This means that at various times the participants could be at the same location but mixing in different social networks.

As a busy environment, this mall provides a venue where teens can occupy themselves while waiting for others to arrive. The participants who identified the mall as one of their favourite gathering places stated that they had pre-arranged places in the complex to congregate, and that they would meet there at the 'normal' time, either on a Friday night or over the weekend. As other groups also liked to congregate there, they had to be flexible about where they would meet and they had alternative venues in the mall if some other group had already taken their place.

As a central meeting place, individuals or small groups from the network were able to come and go, knowing that others from the network would remain and protect their spot at the mall.

As the mall was a popular place to meet, at any one time several other groups could also be there. Although the different groups were separate from each other, they normally contained members that were known to the other groups gathered there.

Members of the focus groups indicated that interaction between the groups was relatively infrequent and would normally be conducted through the members of the different groups who know each other. Occasionally a member of one group, particularly an individual who was known and well liked, would link up with one of the other groups if their group had not arrived. This would provide an opportunity for information to be exchanged between the two networks.

Downtown

If malls are closed, an alternative place to get together is 'downtown'. When asked where 'downtown' was, it seemed that it was not a specific location but rather a series of locations around the inner city. These locations were identified by focus group members as being less popular than the mall. When asked what made these spots less desirable than the mall, a range of answers were given, including:

"there's little or no cover if it's windy or raining"

"we don't feel safe all the time"

"we cannot always control who else is there"

"shop owners don't like us being there and complain to cops"

"hard to group together [particularly on footpaths]".

At two of the focus group sessions, participants indicated that they would try and hangout in either McDonalds or Burger King. This usually meant that they would have to have money to spend on food and drink; otherwise they would be more than likely to be asked to leave or 'kicked out'.

Food courts

The food court in shopping malls was identified as a good place to gather as food and seating are available. In order to make it an effective gathering point, the focus group participants indicated that there needed to be enough seating, close enough together so that everyone from the group can be accommodated. The participants also stated that those who were there would often pool their money so that food could be purchased. If no food was purchased then the security staff would try to move them along so that other customers could use the seats. Depending on who else was there, the food court was a useful place for picking up information, normally through eavesdropping on other conversations or by striking up a discussion with another customer while waiting in queue for food to be prepared.

Sporting events

The discussion in the focus groups made two clear distinctions when it came to identifying sporting events as a place to exchange information. The first of these were sporting fixtures or events involving watching local or national team competitions at sporting venues. The second involved watching or participating in fixtures for the school or at club level.

In terms of attending fixtures involving local representative teams, the participants indicated that they would attend these as often as possible, but that there were more opportunities during the winter season when rugby, netball and basketball fixtures were held regularly. These sports are usually held on the weekends, and attendance at these games

normally depended on who was playing, where they were playing, what time of the day they occurred, cost of entry and who else was attending.

The other sporting fixtures they were involved in were either at club, school and occasionally representative level, and they were either actively participating in them as players or attending the game as spectators. For the players the opportunities to gather not only occurred on the field or the court but in the changing rooms, or in cars and buses to and from the venue.

For the spectators, the two main areas that they could gather were the car park and the sidelines or whatever seating was provided (for example grandstand seating or basketball bleachers.)

Parties

Parties are a common feature of the social lives of many teenagers, however from the discussion that occurred in the focus groups it was apparent that not all had the opportunity to attend them. This was particularly true for those students who live in school hostels, unless they had managed to get weekend leave. The venues for parties were normally a private residence of an individual not always well known to all those attending. Some weekends there would be more than one party being held and, depending on what was happening, the availability of transport and who was hosting the various parties, it was possible that more than one party would be attended.

Church

Not all focus group members admitted attending church. For some they had no choice as it was a requirement of their boarding school, or their parents required them to attend. A minority number of students indicated that they considered church attendance to be very important to them and

their faith, and that they enjoyed the opportunity to worship in a congregation that shared in the same values and beliefs.

Cafés

Cafés were another favourite place to hang out during weekends that was identified by the focus group participants. The numbers involved in meeting in these locations were more likely to be smaller in number depending on the café chosen to meet at. In discussing how they decided which café to frequent, it was stated that one factor affecting the choice of café is what day and time that the group decided to meet, as some of their favourite cafés were not always open when they wanted to hang out. Sometimes cafés that were too busy tried to move on people who had finished their drinks as soon as possible, to ensure that there was sufficient seating for new customers. Decisions to stay at these cafés would normally involve spending additional money to buy more coffees or hot chocolates. Decisions about where to meet were made collectively and usually either arranged through text messaging or at another venue, such as school or a sporting fixture. At times, however, it could just be decided at the time when a group had ended up gathering at another point.

What makes these good places to exchange information?

There was a wide range of answers to the question what makes the mall, downtown, cafes and the food courts a good place to exchange information. These answers included:

“they are neutral places”

“there’s always lots happening”

“we don’t need to be quiet”

“it’s easy for us to come and go”

“it’s safe”

“because there’s always someone there to share things with”.

When I explored these reasons further it became obvious from the answers that these places were an environment in which they felt comfortable and that, due to the activity going on around, there was always something to observe and discuss. When I undertook further probing regarding the comment about the neutrality, the respondents indicated that they were considered neutral due to the fact that they were not like other places, such as school or home, where there are restrictions or rules about who could be present and what could be discussed.

Another reason given for them being good places to exchange information was that they were typically located in vast spaces and there was plenty of room for different social groups to hang out at the same time. The focus group respondents at two of the schools mentioned that there was always an element of exchange occurring between the different groups. This allowed new information to enter one or more social networks as it could sometimes be shared with more than one group, or hop from one group to another. When discussing how this occurred, it was revealed that although there was not a strong bond between the groups, participants from the different groups were known to others, either through school, whānau or sporting connections. These connections allowed participants to mix with each other, and sometimes this occurred while they were waiting for members of their respective groups to turn up or when an individual from one group approached the other group for information. The latter type of exchanges would not always occur face to face and were more likely to be the result of SMS messaging using cell phones.

Information topics

Like many other situations that these teenagers find themselves in, a lot of the information shared was inter-personal or gossip about others. It was totally dependent on who was present, particularly when considered in the different contexts of males only, females only and mixed gender groups. Another variation on this that was noted at two of the schools was that the social groups the participants mixed with did not only involve a mix of genders but usually have a range of participants from different ethnic backgrounds.

An alphabetical list of the topics that these young men and women discuss and exchange information about is provided in the following table, along with an indication of the number of focus groups that identified the topic. The composition of the focus groups meant that five out of the six of the focus groups had young women present, and three of these groups were exclusively female (two at a single sex girls' school and another at one of the co-educational schools involved).

<i>Topic</i>	<i>Males</i>	<i>Females</i>	<i>Mentions</i>
<i>Alcohol</i>	✓	✓	3
<i>Books</i>		✓	5
<i>Boys</i>		✓	5
<i>Car stereos</i>	✓		3
<i>Cars</i>	✓		3
<i>Celebrities</i>	✓	✓	6
<i>Cell phones</i>	✓	✓	6
<i>Cigarettes</i>	✓	✓	4
<i>Clothes</i>		✓	5
<i>Computers</i>	✓	✓	6
<i>Contraception</i>		✓	4

<i>Cooking</i>		✓	3
<i>Crime</i>	✓	✓	5
<i>Diets</i>		✓	5
<i>Dreams</i>		✓	4
<i>Family</i>	✓	✓	6
<i>Food</i>	✓	✓	6
<i>Friends</i>	✓	✓	6
<i>Gadgets</i>	✓		2
<i>Girls</i>	✓	✓	6
<i>Gossip</i>	✓	✓	6
<i>Hates/dislikes</i>	✓	✓	4
<i>Health matters</i>	✓	✓	6
<i>Holidays</i>	✓	✓	4
<i>Homework</i>	✓	✓	6
<i>Ipods/Mp3s</i>	✓	✓	3
<i>Jobs</i>	✓	✓	4
<i>Jokes</i>	✓	✓	4
<i>Makeup</i>		✓	4
<i>Money</i>	✓	✓	6
<i>Movies</i>	✓	✓	5
<i>Music</i>	✓	✓	4
<i>Musicians</i>	✓	✓	3
<i>Netball</i>		✓	4
<i>Religion</i>	✓	✓	4
<i>Rival schools</i>	✓	✓	5
<i>Rugby</i>	✓	✓	6
<i>Rugby league</i>	✓	✓	4
<i>School</i>	✓	✓	6
<i>Sex</i>	✓	✓	6
<i>Shoes</i>		✓	4
<i>Sports</i>	✓	✓	6
<i>Stereos</i>	✓	✓	4

<i>Tangi/funerals</i>	✓	✓	6
<i>Teachers</i>	✓	✓	6
<i>Travels</i>	✓	✓	3
<i>TV programmes</i>	✓	✓	6
<i>Weather</i>	✓	✓	4
<i>Weight</i>		✓	3
<i>Whānau</i>	✓	✓	6
<i>Workmates</i>	✓	✓	3

Table 1: Social information grounds discussion topics

An analysis of the topics that the two different sexes chose to exchange information about demonstrated that there are a number of similarities discussed by them as well as a number of issues that were unique to one sex in comparison to the other.

The males were less inclined to have unique topics than the females, with only three topics (cars, car stereos and gadgets) not also being discussed by the females. In contrast, the females had eleven different topics that were unique to their exchanges. These were books, boys, clothes, contraception, cooking, diets, dreams, makeup, netball, shoes and weight.

Not surprisingly, there were topics that were highly popular in that they were discussed at all six focus groups. These topics included celebrities, cell phones, computers, family, food, friends, girls, gossip, health matters, homework, money, rugby, school, sex, sports, tangi / funerals, teachers, television programmes, weather and whānau.

Celebrities

Sharing information about celebrities has become part of everyday life; this is mainly due to the development of the celebrity culture by

newspaper, television, movies and the internet. Celebrities therefore become 'known', in the sense that apparently every intimate and trivial aspect of their life is reported or exposed in the media. As such, their lives become public and open for public scrutiny. When asked what it was about celebrity culture that made it an interesting topic to them, focus group participants provided a variety of answers. These answers included:

"their lives are supposed to be glamorous but actually they are just like us"

"they [celebrities] face dilemmas all the time and it is helpful to know what they do to get help or solve their problem"

"I like to know what they're wearing, who are they dating and what they are working on next"

"it's like getting an insight into another world, where fame and fortune matter but don't always keep you safe from bad things happening"

"sometimes, it's just a way we can escape from our own problems or issues".

Cell phones

From the discussions that took place in the focus groups it became apparent that cell phones were more than just tools of communication, primarily used for texting, but that they were also indicators of belonging, coolness, wealth and skiting (showing off). Unlike gadgets which only seemed to be a boy thing, cell phones were a source of constant fascination for both sexes.

The fascination with cell phones is most likely due to the fact that most youths have them these days. Those students in the focus groups who

indicated that they did not have a cell phone were small in number, and almost seemed embarrassed to admit this in front of their peers.

Participants at the focus groups mentioned that constant comparisons were made between them and their friends in regard to their cell phone's functionalities, cost (handset and call plan), where they had got it from, why they had chosen it, what other phones had they tried, memory space, internet capacity, colours available, who else had one like it, and what games and other features came with it.

Some examples from the focus groups of the types of information exchanged in the process of discussing cell phones included:

“we like to show off different ring tone options, particularly if one of us has just purchased a new one from somewhere and we want to know where from and how much it cost”

“knowing all the specs [specifications] is part of the fun, we will try out the camera and music options and try and figure out how everything works”

“new phones can be difficult to work out all the features, so we quite often try and work them out, if someone has a phone like it [the new phone] they will help by showing what they know”.

Computers

Unlike cell phones, computers are not always available to Māori teenagers at school or home. Discussion of computers was less likely to be about the technical aspects of computers and more likely to be related to software, such as games or specialist applications, or about the internet and various websites. In the focus group discussions, only a handful of students indicated that they had their own or had access to a laptop or notebook, and this meant that, unlike cell phones, any discussion about computers in a social setting was likely to be without a

computer or laptop at hand. The only exception to this would be if the social setting was at the house of one of those in the social group and they happened to have a computer which was available to them. Therefore, most discussions were often out of context and proximity to a computer.

Examples of the types of information exchanges that take place include:

“we quite often discuss new websites that we have discovered and what’s on them and what their web address is”

“we try not to be geeks, but we will swap information about functions, memory, speed and what other software is on the pc”.

Family and whānau

Both of these categories were identified as topics by all six groups; however it should be noted that not all participants were in agreement as to what was different about the two. A number of participants used the terms interchangeably to indicate that they considered them to be one and the same thing. Those who distinguished between the two indicated that their understanding was that family referred to their immediate family, and whānau was more likely to apply to their wider family including aunts, uncles, cousins and grandparents. As the mix of opinion was evenly spread between the two camps and both categories were discussed at all six focus groups, I decided to discuss and analyse them jointly, to avoid repetition.

When discussing whānau or family, most of the exchanges revolved around relationship issues, health and well being, achievements of family / whānau, travel, employment and behaviour.

Food

Food is a topic that has many dimensions such as eating, cooking, tasting, likes / dislikes and buying. Members of the focus groups could all relate to talking and exchanging information about food in social settings, especially when they were gathered near a food outlet or the food court at the mall they were congregated at.

The girls admitted that at times they will talk about recipes, but this was not really the domain of the boys, although the boys would admit to asking what ingredients were in something they liked. The boys also indicated that they talked quite often about various dishes / meals they did and did not like. This was particularly so for the students who live in a boarding hostel, where meal options were, according to one student, *“predictable and repetitive”*.

In terms of deciding what to purchase, this was also more likely to be related to food court or takeaway purchases, and often involved decisions over what food they could afford, whether there are any ‘specials’ and what something tasted like. Rather than take someone else’s word for it, a student stated that he liked to make up his own mind and he took what he called *“a more direct route to finding out what it tasted like”*.

Friends

Discussing friends with friends and other acquaintances was seen as normal, as they (the ones being talked about) were more likely to be known by those who the information exchange was being conducted with. The types of information traded included where the friend was, what they had done, why they were not allowed out, how long they had known each other, other friends that friend may have, and whānau / family issues of the friend. To some observers this type of information exchange may border on gossip or at times ‘cattiness’, particularly on the

part of girls discussing a mutual friend. However, it was stressed by participants at one of the 'girl only' focus group sessions that it was not gossip, but just a process "*where we learn more about others that we know*". The same informant stressed that if some members of a social group were not as well known or new "*it was normal for us to find out more about them*".

The boys in the focus groups stressed that most of their discussion concerning friends was around "*what they had got up to*". They would also occasionally discuss someone's background, such as friends who "*weren't around a lot*" and / or "*not that well known*", with others. Sometimes information about one of their male friends would be requested by one of the girls, but this was normally done in a less public manner than in front of the whole group, typically to avoid embarrassment (on the seeker's part). A few of the boys admitted to swapping this information with others in the group "*because it is sometimes too hard not to*" and "*it's kind of expected of us*". One of the males indicated that this type of information needed to be swapped as it was "*priceless*" and "*good for a wind up*".

In probing this point further I discovered that there was an element or principle of reciprocity operating, whereby this type of information was prized by many and that the privacy of the individuals being discussed was not always valued or respected. It seemed, particularly in the case of males, that there was an expectation that you would give as good as you got, so if someone revealed something about you, you would just have to 'live with it', but some form of revenge or payback would be acceptable at an appropriate moment.

Girls

When teenagers get together they talk about girls regardless of whether they are girls or boys themselves. The girls will talk about girls

regardless of whether they are in mixed company, whereas boys indicated that they were more likely to talk about girls when they were only with their male friends and only then if it was males that could be trusted. When I probed this further, it seemed that boys would discuss girls with other girls only when it was in a gossip or straight information exchange situation, and not a relationship sense. Any indication of romantic or relationship interest was strenuously avoided to make sure that there was no teasing or potential embarrassment. The boys in the one focus group that was all male revealed that many of the discussions about girls when the 'boys' were together could get quite boisterous, particularly when they were discussing the attributes of the members of the opposite sex. Most of these discussions would be considered on the surface as bordering on the boundaries of bad taste, and would not be considered to be genuine information exchanges as it is debateable whether the information that was being exchanged was true. This was illustrated through the comments made by one young man who stated that *"when the boys are together we tend to try and outdo each other and will make things up if we need to"*.

When girls discuss girls, the conversations and information exchanges could be quite diverse, with the extremities of sincerity and 'cattiness' being realised. Although there was a comfortable ground between the two extremities, this was normally reserved for discussions and information sharing about people they liked and / or respected.

When asked for examples that represented the extremities, there seemed to be more being offered that were at the more sincere end. Examples in this range included discussions about:

"where girls are going after they have finished high school"

"who they are going to the school social with"

"what score they got in a test".

When pressed for examples that represented the 'catty' end of the spectrum, like the boys, the discussions and information exchanged was often based more on speculation and innuendo than true facts. When asked to provide samples, the girls seemed a little reticent to volunteer, and this appeared to be more about maintaining their own sense of dignity rather than protecting the virtues of those whom they maligned in their exchanges. After the formal session had finished at one of the focus groups, I asked one student who was known to me why she and her friends were reluctant to discuss these situations. Her response was along the lines that they didn't want to look bad in front of others, particularly other girls not in their circle (as these individuals were potential targets of their discussions). When asked what, hypothetically, some topics of conversation might be, she reluctantly peeled off a litany of topics including: personal hygiene habits, intellect or lack of it, lack of fashion sense, complexion issues, sexual behaviour, sexual orientation issues, nerdiness, lack of sporting ability or clumsiness. She stressed that the topics they discussed was always dependent on who was present amongst her group and who they were talking about (the target). Some of her friends were more 'catty' than others and this sometimes had a detrimental effect on the whole group when they were present; quite often the information exchanges became farcical.

Gossip

Gossip about other people was highly prized, particularly 'juicy' information about acquaintances, or even better when it was about individuals who are disliked. Included amongst this is whom they have seen in town and with whom. This is more valuable when it involves information that is 'new' or is additional to facts already known by any of the group members.

Of particular interest was gossip about sports stars and celebrities, as the details are normally quite salacious when they have appeared on

websites, newspaper gossip columns or as exposés in weekly magazines such as *Woman's Day* or *TV Guide*. When asked why celebrity gossip was sought after or valued, the answers were quite similar in nature. These were centred around the feeling that these people were so well known to them through television and other media that it was only natural to follow their lives, enjoying their successes, revelling in their misbehaviour and learning from their mistakes. One of the young women explained that "*these people [celebrities] are so familiar to me they are almost like part of my extended whānau*".

As there were only three focus groups that had young men in them, with only one of them being exclusively male, it was interesting to also observe that they too had a strong interest in celebrities' lives. Their main interest did seem to fall in the area of sports and movie stars rather than celebrities who are famous for being celebrities. The boys explained that their interest in sporting celebrities was because they "*seem to be so real*". Exploring this point further, it was due to the fact that many of these celebrities had undergone the same 'rites of passage' as they were going through, particularly in the case of players in the Australasian leagues from the sporting codes of rugby, rugby league and, to a lesser extent, basketball. These are all professional codes and were potentially within their grasp, particularly for those who had some sporting prowess of their own. Another possible factor was the healthy rivalries within and between the codes, and between Australian and New Zealand teams, even during the break between seasons. This makes these sporting celebrities "hot property" to the media, particularly newspapers and magazines that seem to follow every move very closely.

The young women in the focus groups also indicated that they followed the gossip about sports people, and this included the sports identified by the boys, as well as netball, which many of them played. Although netballers are not rewarded financially in the same way that the, mainly male, players are in the other codes that were identified, their exploits are readily reported especially in the magazines catering to the women's

market. A focus group participant indicated that the stories about sportswomen were interesting and more relevant to her, as “*the stories revolve around the challenges they encounter in balancing sport, family and careers*”. These dilemmas were often a point of interest to the conversations and exchanges she had with friends, especially those who were team mates.

Health matters

Although this was an issue that was identified at all six focus groups, like other areas of information exchange, the focus group participants indicated they were cautious about who they shared this information with. Many of the participants indicating that they would only discuss and exchange information about their health issues with close friends and others they could trust. This was particularly true if there were issues that they were embarrassed about. When asked what these might include, the answers again varied between the males and females, with the females actually being more open about some of the issues they discussed than the males. Females were more open with each other when it came to discussing things like their monthly cycles, particularly if they suffered severe pains or other side effects; other issues such as physical and hormonal changes were also a topic of discussion. When asked why they felt comfortable about discussing these issues and swapping information with each other, the main answer that occurred in most of the focus groups was related to the fact that it was a matter from checking with each other to see whether their symptoms were normal or the same as others in their group. It seemed that they felt much safer doing this than asking teachers, mothers and doctors. Several females indicated that they would only do this if their discussions with their friends led them to believe that there was something wrong or irregular.

When asked why males were more reluctant to discuss their health issues, a male member of a mixed gender focus group said that it was because “*males don't want to show any signs of weakness*”. When

asked to clarify this, he replied *"it's a matter of survival"* and another male in the same group said that *"it's self-preservation from teasing"*.

Other health issues such as aches, pains, colds and influenza were quite openly discussed, particularly when members of the group had been ill or absent from school or sports. The focus group members indicated that discussions around these issues were normally focused on who had had what, whom had they got it from and what the symptoms or 'signs' were. They also indicated that even with these relatively safe health issues there was an element of teasing attached, normally around the infectiousness or germ issues. This, they said, was particularly true of any discussions relating to glandular fever and its status as a 'kissing disease'.

Homework

Participants in all six groups indicated that homework was a constant feature of their lives and this carried over into their social lives. The fortunate thing about it, however, was that normally all their school friends (some of those in their social network groups had left school) faced the same predicament. This often led to discussions about aspects of their homework that they were struggling with or had found 'dead easy'. often resulting in some of those who have not been struggling trying to help those who have been. This could include the swapping of information, either through an explanation of difficult concepts or a discussion regarding a particular issue that they needed to make sense of for an essay. The focus group participants indicated that there was a great deal of 'quid pro quo' going on, with the reciprocity often coming in forms other than homework assistance, such as the sharing of food or drinks. At one focus group, it was mentioned that the reciprocity or 'payback' was something that *"just happened"* and was not *"always expected"*. This could sometimes be explained by the fact that at the time the person receiving the information *"doesn't always have something to give or share"*. At another focus group, a participant

mentioned that some of their 'friends' were notoriously 'tight' and this sometimes would mean that they would not always receive the same degree of assistance or information that others less 'tight' would get. Although this seemed to make a mockery of the fact that reciprocity is not expected, it did demonstrate an element of awareness on the part of the social group members of a degree of unwritten 'social norms' that not all group members were complying with.

Money

When it came to discussing money, the participants showed that young people are just as obsessed as those in other age groups, with a high amount of interest in material wealth, what people got paid and how much things cost. The latter was most obvious when someone in their social group had something new to show off. It was stated in one of the mixed gender focus groups that there was always a strong interest in where the new purchase came from and how much it cost in relation to other places that had the same or similar product. When asked for an example of this, a participant provided an account of how he had got a new Ipod and was showing it off to his friends.

"they wanted all the details about how much I had paid for it, who had paid, where had the money come from, where I had got it from, whether it was cheaper than other places that had the same product". This he indicated was fairly standard procedure. One of his 'friends' had also told him about *"seeing something similar at another shop at a cheaper price, but the price he quoted was so low he was either mistaken about the product at the other shop or he was having me on"*.

Other examples of information sharing about money were related to the amount of money they got as an allowance from their parents and what they had to do to earn it. Participants at one focus group of females indicated that these information exchanges had at times been quite an eye opener as *"some of our friends get lots for not really doing much"*.

They also indicated that amongst their friends there were some who never seemed to have much in the way of money. For one of their friends this was probably *“because she has no father²⁸ and her mum doesn’t work”*; although they weren’t sure, they thought she probably did not get much in the way of money from her mother as they *“probably don’t have much to spare”*. The students reporting this said that they tried not to make too much of their friend’s situation, but did sometimes shout her when they were at a food court or they tried to go cheaper places or go without when she was around. This sometimes caused some friction amongst some of the group who did not want to make allowances all the time, but they normally just went ahead and *“either did their stuff on their own or with another group”*.

Other discussions held about money related to parental incomes. Like some other discussions about lifestyle and status, there was some one-upmanship that occurred and some awkwardness, particularly for those whose parents did not work or worked in low-skilled or low-paying jobs. One participant admitted that these conversations were not always definitely based on fact as she was *“sure that some of the group just make things up”*. When asked why, she believed that it was possibly *“an attempt to protect their parents and them[selves] from ridicule”*. To some degree this was an attempt to enhance or confirm the overall mana (status) of the whānau. As another participant stated, *“no one likes to admit that they or their family is poor”*.

Rugby and other sports

As rugby is fairly universally acknowledged as New Zealand’s national sport, it came as no surprise that it was identified by every focus group as a topic that was discussed and about which information was exchanged socially. This information sharing activity seemed to operate

²⁸ Her father did not live with the family

at a number of different levels, these being school, club, representative and the professional levels. The first two levels related to the local scene and was principally about fixtures, who was playing whom, where or what the results were and who scored the tries, and who was injured or sent off. Any member of the social group that actually played in the game in question would normally be a key informant, however if any of the others gathered had actually been a spectator, then they would also have something to say or their opinion would be sought by the others. Games at representative [provincial NPC or Super 14] and international level are typically televised so the conversation and information would be comparative in nature. This would take the form of trading views about the result, the performance of players, and what players or teams needed to do to perform better next time. These exchanges would also include a degree of trading information about different vital aspects of the game such as line-outs won, tackles missed or records that might have been broken. The form of most of this latter discussion and exchange was more likely to be amongst the male members of the social groups, and the whole factual aspect of the information associated with rugby did not feature at all in the focus group discussions where the participants were exclusively female.

Other sports were discussed in the focus group sessions and these, such as basketball, rugby league and netball, were identified as being mentioned frequently in conversations held socially. None of these sports were discussed in all six groups. Like the discussions about rugby, the conversations normally revolved around games, results, players' feats and any other distinctive characteristics of the game being discussed. As these sports are not as well supported as rugby, there appeared to be a greater reliance on an individual or a small number of social group members' reports and views on the games they had either played in or watched. As such, this resulted in a richer vein of information being shared with the group. However, it was admitted to me by a few of the focus group members that they only listened "*out of politeness rather than out of interest*" and would try to change the "*topic as quickly as*

possible". However the females admitted to sharing information and having conversations about netball, considering them every bit as important as rugby conversations they had had to endure or participate in, with one stating that "*boyfriends had a lot to answer for*".

School and teachers

Like homework (discussed above), school was a major part of the lives of the participants in the focus groups, with most having been at the same secondary school for four or five years²⁹, and only a few having been there three or less years³⁰. The impact of school is even greater for those who are boarders, as they live and breathe it close to 24/7, and find it hard to escape the scrutiny of the hostel managers and staff, even when they are in a social setting. This is due to their need to conform to school rules and expected standards of behaviour. From the discussions held in the focus group, it was obvious that most of the discussions about school held in social settings invariably came back to the attitudes and actions of individual teachers. When asked why, the responses from participants in one focus group were that "*teachers can make or break school*" and "*some are really great and others are absolutely awful*". It seemed that from the discussions held in the different groups, it was quite often the disliked teachers who were conversed about the most, and any stories of their behaviour were held in high regard in the social networks. "*Some stories are just unbelievably bad*" said one student. Another said that when they got together in social groups which had students from other schools in them, it almost seemed like "*we trade war stories about our horrible teachers*" and "*it almost becomes like a competition*".

Several of the focus group participants felt that they spent too much time discussing school issues outside of school hours and stated that they actively tried to avoid these conversations unless they could really help

²⁹ Approximately 85 percent of my focus group participants were year 12 or 13

³⁰ Some were year 11s and 2 students had transferred from another secondary school

it, and even then they would try and change the topic. One of these students summed it up quite succinctly by saying as far as he was concerned “*school talk is best saved for school time*”. This did not appear to be the prevailing attitude of his fellow focus group members, however, who seemed to revel in school talk.

Another feature of the social setting information exchanges is the fact that they brought together groups of students from other schools in the district. As such, there was a tendency to discuss and swap information about their respective schools including rules, uniforms, students, facilities, subjects taught, classroom antics, behaviour issues, examinations and tests. The students from the schools that participated in the focus groups said they were interested in what happened in other schools as “*it gives us an opportunity to know whether our school is better than their one*”. “*It’s not the only thing we talk about but most of the time it is interesting*”.

Sex and relationship issues

Information exchanges about sexual and relationship issues were also considered important to the girls in the focus groups, however there was a consensus that these would not normally be discussed unless the other members of the social group that were there were considered to be close and trusted friends, and that they would not talk about these things when boys were around. When asked why, one girl replied that this was due to the fact “*that sometimes there are some things you just don’t want to get out* and this same girl added that “*if boys are there, you just keep your mouth shut, unless you want to be given a hard time about it*”, adding that “*some boys are just so immature*”. The only exception to this seemed to be if an element of information seeking was occurring, whereby questions were being asked about another individual (boy) who was known to some of the social group members. When discussing this point further, participants indicated that this was likely to be asked more

discreetly, and wherever possible they would only ask someone whom they knew would not make an issue out of it.

Like the groups of girls mentioned in the last paragraph, the males also talked about relationships with the opposite sex. From the comments made by the boys in the focus groups, these discussions were less personal and at times more boastful than those of their female counterparts. According to the male focus group participants, most of the conversation about girls tended to be sexual in nature, with discussions being focused on “*who’s doing it*” and “*who’s hot*”, and some of these exchanges being focused more on the highly desirable physical attributes of members of the opposite sex. In most cases the females they were talking about were known to them, either as a member of their larger social network or in another capacity such as attending the same school. One respondent summed it up by saying that, “*some of the guys talk about girls they have either been out with or are thinking about going out with and a lot of it is crap*”. This was described by one participant as “*one-upmanship run riot*”.

The exchanges and information sharing habits of teenage boys gathered at the mall tended to be less focused on gossip and more on bravado. From the answers given in the focus groups involving boys, a lot of the exchanges were in the way of teasing each other, mainly about silly things they had done at school or in other circumstances. At times these could be construed as bullying if it was done in another context (such as school), but in social situations they are probably best described as ‘posturing’ or ‘one-upmanship’.

Tangihanga and funerals

Tangihanga (funeral rites) were the one aspect of Māori culture that penetrates the social gatherings of teenagers. Asked why tangihanga and / or funerals were discussed socially, it was explained by several

individuals across the different focus groups that it was normally as a result of letting others know where they have been, or where they will be. Having the opportunity to attend a tangi³¹ would often lead to information being encountered from outside their usual information world.

The usual information was shared, about who died, how they were related, how old they were, who else was there and anything interesting that may have happened. An example of the last point was given by a participant who had told others of having been at a tangi for an older cousin who had been a teacher. As he [the deceased] was carried to the hearse, staff and students from his school had performed several haka.

When asked for other examples of the types of information they might share after a tangi, participants mentioned telling others about seeing family disputes flare up, working in the kitchen, having to help clean up the whānau urupā (cemetery) before it could be prepared for a burial, stories and jokes that were told about the deceased or others that were present, where the marae was, what it was like and what food they ate there.

Participants in one focus group mentioned that there were some members of their social group who had never been to a tangi, with some of them being Māori that are weak in their identity as Māori or because they were not Māori. If they had not already told them at school or in another setting, they would sometimes have to tell them in a social setting. They identified this as being quite difficult at times, due to their friends' lack of cultural knowledge, and the need to explain why and how things [tikanga] are done. One student identified these exchanges as being quite awkward as other people did not always appreciate "*how draining the process could be*" and sometimes "*could be quite inconsiderate when talking about death*". Another respondent confided that he typically avoided talking about tangihanga in social situations, but

³¹ Shortened version of tangihanga

was more willing to discuss these with close friends away from the spotlight.

Television

Discussing what is on television and the content of television programmes is a favourite pastime. Of particular interest to the groups I worked with were reality television shows such as *Survivor*, *Big Brother*, *New Zealand Idol* and *Dancing with the Stars*, as well as music channels such as *Juice TV* and *C4*, which show lots of hip-hop, rap and rock music. Other favourites were New Zealand's hospital based soap opera, *Shortland Street*, and Australian teenage soap opera, *Home and Away*. Sports viewing also rated highly, with the free to air viewing of rugby and rugby league being highly popular. The conversations and information exchanges that were held in a social setting usually revolved around the plots of the soap operas, or the results of the competition focused shows and what was known about the contestants³². Who has been voted off any of these reality shows was of intense interest and the information, and opinions on why they have been eliminated, could apparently become "quite animated", particularly if there was "disagreement over who should have got the boot". Another participant mentioned that they often used these occasions as an "opportunity to catch up on any programmes I missed".

The discussion at the focus groups revealed that television viewing habits and therefore the conversations tended to be fairly evenly split along gender lines. Males showed less interest in soaps and more enthusiasm for sporting and action related viewing, whereas the young women went more for the soaps. Both genders displayed equal amounts of interest in the reality TV shows.

³² Unfortunately in New Zealand competitors in *NZ Idol* and *Dancing with the Stars* become overnight sensations and are just as likely to be rated as A list celebrities

Other topics

As the table on page six shows, there was a wide range of topics discussed in social settings, but not all topics featured universally across the six focus groups. This is not a reason to dismiss them as insignificant, however when going through the list it is possible to identify topics that perhaps would be best placed as sub-topics of those that are discussed in all six, with very few of the topics being unique in nature. An example of a sub-topic sitting under another topic is contraception, which could comfortably sit under any discussion relating to sex or health matters. Other obvious examples are the possible inclusion of movies with television or with the gossip attached to celebrities, or netball with the other sports topics being discussed.

Another point to be considered is that all these topics were put forward by the focus group participants and did not come from a prepared list. As these topics were volunteered, it is possible that other topics were forgotten or the participants felt that they had covered the issue with a broader topic heading.

Virtual Information Worlds

In more recent years social situations have shifted their focus, from meeting kanohi ki te kanohi (face to face) to using technology to achieve the same level of inter-personal contact. As the following paragraphs demonstrate, this inter-personal contact remains an important component of the information culture enjoyed by young Māori.

Virtual worlds

In the focus group discussions, the student participants were asked to identify the different ways in which they communicated, exchanged and shared information in their social networks and with friends, whānau and

other acquaintances. From the resulting answers it became clear that kanohi ki te kanohi communication was still an important factor, but not always possible or, at times, appropriate.

The participants identified texting using cell phones, email, Web 2.0 tools and the telephone as the other means by which they communicated with each other and other social and familial contacts.

Cell phones

By far the most heavily used means of communicating between social network members was the cell phone. These were almost exclusively used for the purposes of texting (also known as SMS messaging). Texting was perceived by almost all of the focus group participants as an essential communication tool useful for exchanging information between friends, whānau and social network contacts. Only a few focus group members did not have a cell phone; however they did not feel disadvantaged by this, with one of the participants stating that her friends “*keep me up to date with where and when we are meeting*”. This was often done via a personal telephone call by one of her friends.

Other students stated that the cell phone was a quick and cheap way of communicating with each other, as well as being private. The cheapness of the use of cell phones was attributed to the ten dollar texting plan offered by one telecommunication provider and the free text weekends offered by the other main provider. Several of the participants indicated that they had more than one cell phone and used the two different providers to their advantage. They also noted that use of both networks allowed them to maintain contact with all of their friends and whānau members, as there were always distinct price benefits to be had in using the same cellular network to communicate with each other (there was a higher cost in sending texts to phones that were on the other network). As not all participants were connected to both cellular networks, distribution of information across the whole social network was

dependent on individuals that were, with these individuals acting as a conduit by receiving on one network and distributing on the other.

The main types of information communicated and exchanged by texting included details about what time to meet and where, the results of sporting fixtures, what social events were on, what people were doing and what one participant likened to 'trivial pursuits' as it was more like idle chatter. The participants also stated that very occasionally they would use cell phones to ask for information from each other.

In terms of arranging meeting places and times, the cell phone was seen as being a necessary accessory as it was instantaneous. As already noted, meeting places were normally arranged in advance, but circumstances could often see these plans change and it was explained that the judicious use of a cell phone could see this information communicated quickly by using the distribution list tool to reach all contacts simultaneously.

Texts relaying information about the results of sporting fixtures were a quick way of alerting friends and family about the outcome. Focus group participants stated that they were more likely to text when their team had been successful. It was also noted that the texts could be sent at regular intervals during a fixture, but this was more likely to occur when the person texting was a spectator rather than a participant in the game.

Texting conversations that focused on what the person texting and the recipients were doing, and other chit-chat, were seen by the focus group participants as being the equivalent of the type of small talk and trivial conversations that would take place if they were all gathered together in a physical place. Although the text messages were relatively short in nature and often in text language, the exchange between participants could be quite lengthy, with messages being exchanged over a considerable period of time. This happened frequently when those

having the exchange were on the same cellular network with an unlimited number of texts.

Although texting was predominantly seen as a peer to peer activity, most of the participants with cell phones stated that they texted their parents and other whānau, although these texts tended to be more limited in their content. Examples include inquiries from parents about where they were, what they are doing and what time they would be home. Only a few of the participants admitted that they volunteer this type of information without prompting, although there was a consensus that asking to be picked up was something that was a regular request on their part. Several of the participants stated their belief that texting was not their parents' preferred mode of communication but that they saw it as a necessary evil, as it was an easy way of maintaining contact with them (the teenagers).

An interesting theme that emerged from the discussions in the focus groups was the type of language that was used in their text. As could be expected, the majority tended to use text specific forms of English, using abbreviations and acronyms to speed up the text conversation. However several of the participants stated that their texts incorporated te reo Māori (Māori language) into their text messaging; an example was "*k whea u*". (where are you) When probed further, participants revealed that this was sometimes in the form of bilingual use of Māori and text English in the same message such as "*k t haere t school*" (kei te haere i te school – I am going to school) Like the use of English for texting, the text version of Māori was abbreviated, such as pi for pai (fine), or t for te (the). When discussing the use of text language, participants also agreed that they had to keep things simple when they were texting their parents, as they thought they (the parents) had trouble deciphering text speak.

Email

The use of email by focus group participants was minimal, as it was seen as cumbersome and dependent on access to a computer and the internet. However almost all of the participants stated that they had an email address, with several having more than one.

The general attitude appeared to be that email was only for communicating with parents, and older whānau members and family friends, who were not big on using other communication methods such as texting and Web 2.0 tools like MySpace and Bebo.

When I explored this further, participants revealed that email was only more preferable to using a land line for an actual phone call, and was not considered to be an information seeking or networking tool.

One of the issues that emerged from the discussion was participants' inability to check their email on a regular basis due to restrictions placed on them at school or at home. This made it an unreliable information tool. Another issue that made it difficult to use was that emails were often blocked by the filter at school because they had attachments. This interfered with the circulation of trivial email traffic that may have jokes and images attached.

Web 2.0 tools

Web 2.0 tools are relatively new web applications that allow users to interact with each other and to create content on tools such as MySpace and blogs. Since the fieldwork phase of this research project was conducted, there has been an increased interest in Web 2.0 technology, particularly the social networking site Facebook, and the Twitter service which is a form of micro-blogging that enables users to send 140 character messages known as tweets to other individuals ('followers').

Of the students who used these types of tools, most used Bebo to communicate with others. These students had their own page where they published their thoughts, links to favourite websites and photographs of themselves, friends and whānau. Their “friends” could leave comments on the page. Bebo accounts can be established as public or private accounts. As a private account, the page owner could choose which friends were added to their profile and got access to their pages.

Most of the students who signified that they had Bebo profiles indicated they preferred to keep their profiles private, with only a few stating that they had a public profile. Those with strictly private profiles indicated that keeping their profiles locked down allowed them to communicate with their Bebo friends in a secure environment, without being discovered by parents or those people from school they did not want to engage with. Others with private profiles had joined school sites which allowed anyone who had also joined those sites to also see them.

A large percentage of the students who had Bebo profiles also indicated that they had a MySpace profile as well. However this was not used as much as Bebo, with one student labelling MySpace, as “*so last year*”. When asked about what determined why a social networking site went out of favour and what determined which new tool takes its place, the answers seemed to indicate that migration from one tool to another was normally the result of a friend discovering the new tool and inviting others to join. Once this happened the old tool is all but abandoned, with the profile not being updated or maintained.

Telephones

As previously stated, there was a general reluctance by teens to use a telephone to communicate with friends, with this being the least preferred mode of communication. Participants in the focus groups indicated that

any contact with friends on a telephone would normally only occur when no other option was available. This could be because one of the parties did not have a cell phone for texting, or they had a cell phone but had no credit or their battery was not charged. In these situations the telephone was used only to communicate briefly and to exchange basic information with each other.

The participants indicated that they were more likely to use a telephone to communicate and exchange information with their parents, grandparents and other whānau members. This use was seen as being necessary due to the fact that there was no other way of easily communicating with these whānau members other than in a physical setting, which again was not always an option if they lived in a different city.

Discussion

The places where young people choose to congregate is highly dependent on what time of the day and which day of the week they are gathering together. It appears from the discussions in the focus groups that shopping malls and food courts (normally all under the same roof) were their preferred congregational point. As noted earlier in this chapter, like most information grounds identified in the literature (Fisher, 1999, 2005), where the group meets was temporary and would depend on availability of the location and the time the group met. However the students in the focus groups indicated that as long they had friends or acquaintances available they would meet wherever it was possible to do so. The other places elsewhere in 'downtown' therefore seemed to be back-up gathering points rather than pre-arranged meeting spots. If a preferred spot was not available (because another group was there or it was shut) then it became a case of trying to let others know, and one of the more popular means of doing this was through SMS texting using cell phones. Use of cell phones for texting was preferable to using them for voice calls as the latter were normally more expensive, whereas New

Zealand's two main mobile phone companies both had text deals that were dependent on monthly quotas so that one payment covers the whole month's texting activity.

As many of those in the focus groups engaged in a range of activities, they also found themselves participating in more than one regular social group. An example of this was the young woman who acknowledged having three main social groups, with these only having a small amount of overlap between them. The three social groups she belonged to were found at a sporting venue, the shopping mall and the church she attended. The advantage of being in more than one social group was not lost on this individual, who identified that she was able to share information between the three groups which meant she always had something to talk about. In this sense this young woman could be classified as an 'information carrier' between her three groups, thus enriching and injecting new information into each group from the others. Theorists such as Agada (1999) and Metoyer-Duran (1993) would also label these 'information carriers' as gatekeepers, due to the fact that they made judgements and decided what information to share from one social group with their other social groups, thus acting as a filter.

However, it was also obvious from the dynamics in the focus groups that there was a tension between the students who actively engaged in the topic of information grounds and those who did not. This may have been due to the latter group being alienated from those who had a busy and active social life because they did not. This strain was evident in the focus group discussions where there were non-verbal behaviours going on between different groups of students, reinforced by the tendency for the different groups within the wider focus group to sit separately from each other. In one focus group this was blatantly obvious as there were only six participants, three of whom who sat together and engaged in the focus groups as a team. The other three were a group of two and an individual sitting alone. The non-verbal language demonstrated an underlying 'coolness' between the group of three and the duo, whereas

the single individual engaged with both groups without showing a particular allegiance to either. The presence of this tension might have led to less robust discussions in these focus groups, as the dynamics quite conceivably restricted or restrained the contribution that any individual or group of individuals may have had to each other.

In viewing the significance of gatherings of social groups of Māori as an information ground, one must remember that the groups they were in socially were not always exclusively made up of Māori. Three of the focus groups identified Pākeha³³, Asians³⁴, Pacific peoples and other Europeans as being in their social groups. With this being the case, participants identified that Māori cultural values or nuances were not always the norm in these situations due to the values brought to the group by the other cultures, and as such the group operated in a manner that was different to one that was exclusively Māori. For some Māori this would be inexcusable, as they believe that as Māori culture is indigenous to New Zealand it would outweigh the rights of other peoples. However for the majority of Māori youth who participated in the focus groups this was not an issue. For many of those in the social groups it was their only opportunity to 'be themselves', without the expectations of the school or their whānau weighing on their shoulders. As teenagers they were able to congregate without any fear of committing any faux-pas, or breaching an aspect of tikanga Māori or the school rules. Essentially this was the chance to 'act normal' and be able to exert their own control over their lives. This was particularly true for those who were in a school-focused situation seven days a week, who would take any opportunity to step outside the boundaries of the restrictions imposed in that environment.

³³ Pakeha is a generic term that refers to New Zealanders of European descent, but it is not universally applied, with some whom the term may describe, objecting to its use as they find it offensive.

³⁴ The term Asian is used generically in New Zealand to describe any person to come from the Asian continent, so including Chinese, Korean, Vietnamese, Japanese, Malaysian etc. Some of these peoples find the term offensive as it infers that they are united and share one culture.

In essence, being in a social group is also an opportunity for the members to assist each other in making sense of the world they live in. For Māori youth this world can be particularly perplexing at times, as they have the dual expectations of conformity to tikanga Māori and the norms of everyday society, which indigenous commentators like Nakata (2002) and Durie (2005) label as the cultural interface. According to Nakata (2002:285), the cultural interface is where indigenous knowledge and Western knowledge systems intersect, leaving the individual at the interface to make sense of the context they find themselves in at the time and draw on the appropriate information, values and behaviour for that particular situation. Therefore, Māori youth can use their social gatherings to exchange information which will assist them to participate effectively in both the worlds they are part of, without fear of judgement of their teachers, parents, elders and whānau.

Although at times they will discuss and exchange information that is related to Māori issues it tends to be the exception rather than the norm, as demonstrated by the information exchange around the issue of tangihanga which became more about death itself. It is possible that the discussion and exchange of information about these events in a social setting is one way of demystifying the issue of death and understanding the rituals associated with it. This, in part, may include getting insights from those with a non-Māori background, particularly if they [the Māori] have been at a funeral that is less than traditional (in a Māori sense of traditional). If they wish to further define their understandings of Māori tangihanga or tikanga Māori (Māori cultural customs), it can be seen in the chapters on information exchange at school and in cultural situations that there are other places where these concepts can be explored in greater depth and within the appropriate cultural context.

Members of both sexes had a number of topics that were of mutual interest including family issues, in particular discussion of what was going on home, why they or their siblings had been grounded by their parents, work or financial issues affecting the family, and visiting family

or friends of the family. These discussions were not always reciprocal and one respondent thought they were more likely to occur when someone was “*worked up*” about an issue and needed to “*blow off steam*”.

Another topic of common interest among youth was sport, sportspeople and sporting fixtures (particularly if there are any ‘big’ games on). As sport is such a large focus at school, it is not uncommon for it to spill over into life outside school. The discussions in focus groups again revealed a degree of difference in the types of discussions taking place within the individual gender groups, as some common interest in ‘marquee’ sports such as rugby union, basketball and rugby league. The girls in the focus groups stated that they had a strong or at times a limited interest in some of these marquee sports, but also keenly discussed sports such as netball, hockey and football (soccer), which they were more likely to either be involved in as a player or an ex-player. The boys discussed not only these marquee sports, but also others such as boxing, martial arts, skateboarding, touch (rugby) and motor sports. Unlike the girls, their interest in all these sports was not necessarily developed through participation, as they were more likely to be spectators rather than actively involved in boxing, martial arts and motor sports. However, with a steady diet of these sports being available on television, the boys could discuss and exchange information about them from an ‘informed’, albeit a spectator’s, perspective.

The content of the sporting discussions varied enormously and was largely dependent on when the group gathers. Focus group members indicated that when they got together on a Friday night, the exchanges would largely focus on forthcoming fixtures that individuals would be involved in as a player or a spectator. The latter category could also relate to big ticket fixtures being played at the stadium or being screened on television. These exchanges revolve around where the game was being played, at what time, who was playing, what was known about the other team, who else they have played and what the results were. If the

group was gathered during the weekend, most of the discussion and exchange of information was about results, highlights and the overall performance of different players and / or the referee.

The types of social interactions in which these Māori teenagers participated seemed to be the same regardless of whether they were exchanging information in a physical meeting place or were using virtual technologies to communicate.

So what's different about these information grounds for Māori youth?

Unlike the other information grounds settings discussed in this project, the context for the social grounds was less culturally focused. In these environments the discussions and exchanges that occurred were largely peer to peer in nature, and this lowered the weight of expectation that would be present in an environment that is culturally charged. In most of these situations there was a distinct lack of adult supervision or input in to the information exchanges occurring, and this allowed the Māori students present to relax and be themselves in a manner that was difficult for them to achieve when in cultural and educational grounds.

Another factor that influenced the nature of these information grounds is that not all participants in the exchanges were of Māori descent, with there being a mixture of Pākehā, Asian and Pacific peoples. Although in some of these situations Māori participants were in the majority, this did not always result in them dominating the social group. The dynamics therefore were not strictly dictated by culture or ethnicity, but it was obvious that social norms had been determined and agreed to collectively by the group over time. The fact that these norms were loosely connected to tikanga based principles was not surprising given that their development was likely to be contributed to by members of the group who brought cultural influences to the group.

Gender issues

The groups that gathered not only have a mixture of different ethnicities, they also tended to have a mix of genders at times. When this was the case, the conversations and information exchanges appeared to be narrower, mainly as there were some topics that one gender did not want the other to be party to. This meant that on some occasions smaller groups would gather and allow these secretive exchanges to take place.

The range of topics discussed in the social groupings was quite diverse but they can be divided into the following categories: sports, health, people, entertainment and school. The amount of time devoted to each category or sub-category varied depending on who was present, where they were congregated and when they were there.

Exchanges between different social groups

Another important characteristic of the larger places where these social groups gathered was that there were quite often other groups present at the location as well. This would occasionally mean that the preferred gathering point of the social group would be unavailable, as another group could have already claimed their spot. If this occurred, the group would have to revert to one of their backup spots. If necessary, text messaging via cell phones would alert other social group members to the new location. This degree of adaptability seemed to indicate that the gathering spot itself was not the trigger for facilitating effective communication and information sharing to take place, thus indicating that it was the people, not the place, that was more meaningful.

If more than one social group was present within the same complex there was an increased likelihood of communication and information exchange between the groups. From the comments made in the focus groups, this situation did occur on a regular basis and the communication

was mostly facilitated by individuals from each group who had a common bond, either through school, sporting rivalry, whānau or a mutual friend.

The ties between the individuals from the different groups varied depending on the context that the relationship was established in (for example whānau or sports), however if the groups were exchanging information between each other then the information would normally be quite rich to the groups receiving it, as it was be new to their network. However, this was not always the case when the information was already known to others in the network, except if the base information had been added to.

The method of communication between the groups was again varied and would either be face to face or by text messaging (if respective phone numbers are known). Occasionally the two groups would morph into one, but this was largely dependent on the relationships between the groups and how well known or liked the members of the other group were to the other. It was stressed that, if this occurred, it was likely to only be a temporary arrangement and was usually due to others (from the other social group) not turning up. When the groups combined in this way, there was likely to be substantially more in the way of cross-fertilisation of information as there was a longer period of exposure of one group to another.

Sub-social group issues

Another factor that emerged from the focus group discussions was the sub-cultures operating within the one social group. This was largely represented by the different information needs and exchanges between members of the same gender, and to a lesser degree between members of the same ethnic groups. The conversations and exchanges exclusively between girls were often focused on topics that they did not wish to share with boys. As indicated earlier, these were more likely to

be about relationship issues and personal hygiene matters. The boys would at times be more likely to talk only to each other about members of the opposite sex they were attracted to, and at other times about common interests such as cars or motorbikes that might not always appeal to the females in their group. It was perfectly normal for more than one discussion or exchange to be taking place at the same time and these discussions would often spill over to the main group.

It is important to note that the social groups generally gathered in public places as opposed to each others' houses. Some of these gathering spots were cultural or religious in nature such as the church or the marae, however another generally popular social institution, the public library, was largely absent from the list of places where meetings took place. The chapter on information barriers covers reasons why Māori students do not use public libraries, however as that chapter shows there appears to be individual use rather than group use, normally for a specific information need rather than as a general place for socialising.

Conclusion

This chapter has provided an insight into the importance of social gathering points and social groups to Māori students. The analysis of the data linked to this chapter has revealed three key findings of relevance to our understanding of how Māori students make sense of the world.

The first of these findings is that, by coming together in their social groups, they have opportunities to relax, be themselves and to enjoy each others' company without pressure from figures of authority, including their school teachers, boarding staff or their parents / caregivers. This is important to them as in both the school and cultural³⁵ environment they are under the spotlight and their behaviour is subject to

³⁵ The cultural information grounds will be discussed in Chapter 7

intense scrutiny. Although at times Māori will be the pre-dominant ethnic group of those that make up a social group, and although Māori cultural values and customs will play an important part, they will not always dominate the interactions. This can be attributed to the need for Māori youth to feel unburdened and to not have to comply with stricter forms of tikanga Māori. The same can also be said for all social group members who may wish not to be bound to the rules and values of their school. By being in their own space in their own time, they are able to control who is present and determine their own behaviour. This will include the type of information exchanged, which will vary according to who else is present. Of particular note is the variation in the types of information shared and exchanged depending on the mix of genders present, with the data showing that both genders preferred to share some information with their own gender only when members of the other sex were not present.

The second key finding in this chapter is that social groups meet at regular times and places, which means that there is very little in the way of organisation required. Any variation to these arrangements frequently leads to two other forms of information behaviour. The first of these is that, if the normal meeting places are not available, information about alternative arrangements will be pushed out to others using cell phone text messaging. The other form of information behaviour is that the congregating at the normal spot by other groups will lead to members of the displaced social group interacting with the group already there, but only if there is an existing link between them. This interaction between members of two different groups provides opportunities for information to be exchanged and for new information to enter into the other network, thus enriching the information environments of both groups.

The third finding relates to the increasing importance of technology to the sharing and exchange of information. As mentioned in the previous paragraph, texting is used to communicate changes in arrangements, but is also used to maintain contact between group members at other times

when face to face meetings are not possible. Technology also makes an important contribution to how group members communicate with other members of their whānau, particularly those without cell phones. The research participants realised that if they wanted to communicate socially / casually with other family members, they would have to adapt their communication or technology tool accordingly and use email or a telephone, depending on whom they were interacting with. The final point with regard to technology use by social group members was that there was an increasing interest in the use of blogs, social media and other tools associated with Web 2.0 technologies. As these technologies have evolved since the data collecting for this research project was undertaken, it could be assumed that interest in these communication technologies has continued to grow and that this should be investigated further in a separate research project.

This chapter has focused on the value that Māori students place on their interactions with each other in social environments. Chapter Seven's focus is closely linked to the two research questions relating to culture, including the value of information in a marae or whānau context, and whether Māori identity has an impact or is of any importance in information seeking, sharing or exchange in this environment.

Chapter Seven

Cultural information grounds

The purpose of Chapter Seven is to investigate more closely two of the research questions relating to the impact cultural context has and the influence that Māori identity has on the information behaviour of Māori students, particularly when they are in a distinctly Māori environment like a marae or when engaging with whānau members. The different areas of the marae where people share and exchange information are identified, as are key informants and the range of topics discussed. In looking at the importance of Māori identity, the role that knowledge of te reo, whakapapa and iwi affiliations, and the Māori students' relationship with their marae are considered. In Chapters Five and Six, the focus was on how Māori students sought, shared and exchanged information in social networks with their peers at school and social settings. In this chapter the focus shifts, from interaction with their peers to the interaction that these students have with individuals from a range of different generations within their whānau or marae community. The chapter also considers the role and value of information in these inter-generational relationships.

As Māori, there is a strong expectation that these students will be active participants in the wider context of Māori society. These expectations are generally driven by their parents, whānau (extended family), teachers and, to a lesser degree, by their peers. For Māori who do not have a strong sense of identity or cultural knowledge, these expectations will at times prove to be a major challenge. This is largely due to the fact that there will be those amongst their Māori community who will expect them to be active in their participation in focused cultural activities, such as

powhiri, (welcome) tangihanga (funeral rites) or kawē mate (memorial ceremonies).

Māori is a culture that is rich in ritual, ceremony, values, principles and beliefs, and most of this culture is able to be experienced in a variety of contexts, not only traditional Māori settings. In contemporary settings these cultural actions can occur at school, work, home, a stadium, a hall (or other community gathering place), or a marae (meeting place) (urban or traditional). The location of any Māori focused event is not so important; it is the cultural practices and protocol that will provide the context, not the place, although some purists would suggest that undertaking these actions in a marae, or an individual's turangawaewae (rightful place) has more meaning than artificial cultural constructs like a town hall or sports stadium.

There will also, at times, be a strong sense of expectation from non-Māori that because these students look Māori, they will be able to do everything stereotypically expected of Māori, including an expectation that they will excel at singing and playing guitars, and on the sports field. Of course this is not always the case, and those with weak or no cultural knowledge will be unable to participate fully in cultural activities. However, without these attributes, they will to all intents and purposes still consider themselves to be Māori, and others (Māori and non-Māori) will also consider them as Māori. Durie (1994) and Cunningham (2004) provide models that confirm the diverse realities of Māori identity, from individuals highly versed in tikanga and te reo Māori through to those who display clear physical characteristics as Māori but lack any cultural or language abilities to enable them to participate in Māori society. That is not to say that the language and culture cannot be recovered and cultural identity strengthened.

As stated, it is the practice of culture and not the place that necessarily determines where information exchange takes place in a cultural context.

From the discussions held in the focus groups, other than marae, the places where this exchange takes place are at home (either one's own or that of a whānau member), kapa haka (performing arts) (practice and performance) and events that have been organised by school or the whānau (extended family).

Te Marae: one location many sites

The core location for any culturally focused information grounds is the marae. Historically, marae have always been a meeting place for Māori, and traditionally they have been linked with a particular iwi, hapu or whānau. As such they are an integral part of Māori culture and society. Mead (2003:96) identifies marae as belonging to either of two categories, traditional or modern. The traditional marae is described as being based in a tribal rohe (area) of an iwi on land that the tangata whenua (people of the land) have a strong bond with, and it often will be part of a larger complex that includes not only a

whare tipuna (house named after an ancestor) [sometimes known as wharenuī (large house)], but other buildings including a large wharekai (dining room), a toilet block, shelters for the visitors, sometimes a whare mate where the dead lie in state.

Mead also states that some traditional marae will now also have other facilities such as kohanga reo (pre-school language nests), classrooms and a church.

Modern marae sometimes have the same facilities as their traditional counterparts, however it has become quite common for these to be urban in nature and not necessarily linked with any particular iwi or hapu. The development of these marae can be traced back to the mass urbanisation of Māori in the 1950s and 1960s, and were developed by Māori to ensure that traditional customs could continue to be practiced in the cities. Over time, more of the urban Māori lost links with their rural

origins and the urban marae became their turangawaewae (place to stand). Marae are also found attached to educational institutions such as secondary schools, universities, polytechnics and wananga (school of higher learning), but not all of these have additional buildings to support their wharenuī.

For Māori, the marae is a site that not only acts a community gathering point, but also as a place where tikanga Māori is paramount and dictates the protocol for ceremonial and ritualistic activities. As a gathering place, the marae can host a range of cultural, social and official (hapu meetings) events, and as such will be busy and will not always run to true tikanga (customs). However the rules of protocol will traditionally be followed, especially relating to the consumption and preparation of food.

The marae cannot simply be described as a single information ground as described by Fisher (1999³⁶, 2004, 2005) who developed the concept, as they are large complexes with many different zones. These zones allow such a range of discussions and information exchange opportunities to take place, that they qualify a marae as the ultimate Māori information conduit with a smorgasbord of information available for exchange. The site itself is permanent but those who gather there will change over time, thus fulfilling the criterion of being temporal as defined by Fisher (2005:185).

Identifying the marae information grounds

The focus group members were asked to name the different areas at a marae where they gathered and exchanged information, and this resulted in the identification of ten main areas being mentioned in each focus group. These locations include the waharoa (gateway), the marae-atea (courtyard), wharenuī, wharemoē (sleeping quarters),

³⁶ This reference is under Pettigrew in the bibliography, as Karen Fisher was writing as Karen Pettigrew in 1999

wharekai, mahau (porch / veranda), smoking spot, wharehoro (bathrooms), kauta (cookhouse) and hangi (earth oven) pit.

Other areas of a marae that were identified included the health centre and the papakainga (housing units)., These are not present on all marae, with health centres being more likely to be found at larger urban marae and the housing more likely to be linked to marae in rural areas.

The waharoa

The waharoa is where the manuhiri (visitors) gather before a powhiri (formal welcome). The number of people gathered at this point will depend on the reason for their visit. If it is for a tangi (funeral), hui (meeting) or a celebration, it is possible that the numbers will be large, with not all of those gathered knowing each other. It is normal for those gathered and waiting to go on to a marae to establish amongst themselves what form their response to the welcome will take. Depending on how familiar those gathered are with tikanga Māori, some sharing of information regarding the protocol of the welcome will be exchanged, and those who will participate as the spokespeople will want to know who is amongst the group, where they are from and why they are there. This is a process known as whakawhanaungātanga (making connections). Focus group participants identified the waharoa as being a key information point, because it is a central gathering place and as such it brings several strands together in one place and one time. A participant identified the waharoa as a 'sorting pen'. They explained that this was where those gathered will identify themselves, why they are there, who will speak and what they are likely to say. This means that *"there is a lot of information being exchanged between the men as they sort out what order they'll speak in and what the kawa (protocol) is"*. The participant also mentioned that *"small-talk will be going on amongst those gathered as they work out who's who and this is when you find out how you're related to different people"*.

The marae-atea

The karanga and the korero

Once the manuhiri gathered at the waharoa are ready to proceed onto the marae, they will indicate to the tangata whenua (rightful occupants of the land / marae) that they have finished their preparations. When the tangata whenua have finished their own preparations, they will assemble at the seating provided for the welcome. They will then signal their kaikaranga (caller) to commence the karanga (call) to the manuhiri. This karanga is structured by the caller to welcome the people to the marae and the region (when appropriate).

Once they have passed the waharoa, the manuhiri have advanced on to the marae-atea, and as such the rituals of encounter have commenced. The kaikaranga for the manuhiri will respond in kind to the tangata whenua, and at this point provides a wealth of information to them. Their karanga will include an indication of who they are, whether they are one group or many groups, where they are from and what the purpose of their visit is.

The kaikaranga from both groups make special mention in their calls of well known tupuna (ancestors) from their respective marae, and will also acknowledge the dead, especially those who may have recently passed away, particularly if there is a strong connection to the group being welcomed or the one that is welcoming. All of this is conducted in te reo Māori (Māori language), so for those listening to or participating in this ceremony it is essential that they are fluent in te reo Māori. This is normally the case for the kaikaranga and kaikorero (orators), as the information being shared by their opposite numbers will more than often require a response in their karanga or whaikorero (speeches). The lack of fluency of other participants may lead to them not picking up information that is important to them.

Members of the focus groups indicated that they did not always get to witness the karanga at their own marae as they might be busy elsewhere, including preparing food or setting up rooms or sleeping quarters. If they were part of an ope (group) visiting another marae, however, they got to hear the karanga from both sides, i.e. the tangata whenua and the manuhiri. The discussion at the focus groups revealed that the same karanga could provide different forms of information to those who experienced it. Female participants indicated that it was an ideal learning experience, in terms of how to structure a karanga to get the right timing and what to include. Male and female participants alike indicated that listening to the karanga gave them an indication of the relationships (if any) between the marae and those visiting it, resulting in more discussions amongst the people on both sides of the encounter. One participant at the girls' school said that to her "*the karanga is like a reciprocal roll call, of the dead and those alive*" and "*if you listen carefully you can hear the references to where people are from and who has recently had a mate [death] in the family.*"

The whaikorero: the speeches

The kaikorero are male in most iwi areas, although there are some iwi (tribes) that allow women to speak on the marae³⁷. Their role as orator for their group, whether they are the hosts or the visitors, is to ensure that their side's sentiments, goodwill, sorrow, connections and thoughts about the take (purpose) that is being discussed are conveyed to all those present. In listening to the exchange between kaikaranga, the kaikorero will have had the opportunity to identify any special connections, stories or events attached to the other side that they should refer to in their speeches. This knowledge is further enhanced through whispered conversations with those sitting close to them on the paepae (speakers' chairs). Quite often this information will be passed onto them

³⁷ These are in areas on the East Coast of the North Island, Northland and parts of the Bay of Plenty region.

from other members of their group, (usually kuia (women elders)), who may have recognised someone on the other side who should be referred to or paid homage to, particularly if they have been recognised or honoured for their achievements or if information needs to be passed on about that 'special' person's relationship to their group.

The exchange occurring between those on the paepae and the people in the rows behind them will often take place while another speaker is on their feet and, although this could be seen as rude in some cultures, in Māoridom it is acceptable. This is because there is a need for speakers to be prepared, to ensure that there is no loss of mana (status) on their side for not according due respect to the speakers, and the people who are receiving them or who they are being received by.

As each kaikorero rises to speak, they will impart further information to those assembled and, again, it is vital that this information is heard, absorbed and responded to in the most appropriate manner. It is normal for the tangata whenua to have the last say in these proceedings, regardless of the different kawa³⁸ that are in place, and this will give them the opportunity to respond to any of the information that has come from the visitors. After each speaker, a waiata will be sung to support the content of their speech. Quite often, these waiata will be oriōri (traditional songs), that represent significant occasions or tupuna in the history of their marae, hapu or iwi and as such place that event or person in context.

When participating in powhiri, the focus group participants indicated that they were just as likely to learn from those sitting around them, particularly if they were near to the paepae, and could listen in to the conversations and exchange going on between those on the paepae and

³⁸ The kawa of the marae varies from tribe to tribe, but the most common forms of interaction for speeches are Paeke and Tau-utuutu. In paeke, all the tangata whenua speakers speak first and then the manuhiri with the tangata whenua having the last say. In tau-utuutu the speakers alternate from one side to the other with the tangata whenua having the privilege of speaking last

those that are passing information to them. It was noted by a focus group participant who was not very fluent in te reo Māori that they did not always understand what was going on if these conversations were taking place in te reo, and they would have to rely on someone else to either tell them then or later on.

Most students in the focus groups indicated that they were normally passive participants in powhiri (unless it was a school related activity), and as such the information they gather from the karanga and the whaikorero assisted them in learning more about both the hosts and the visitors, particularly if there was discussion around people, events, placenames, whakapapa (genealogical links), agreements and landmark decisions. Many of the focus group participants indicated that they collected and disseminated the information they collected from the korero they are exposed to and shared this with their friends and whānau.

Hariru, hongī & kai

After the speeches, the tangata whenua invite the manuhiri to come forward and greet them with a hongī (pressing of noses) and a hariru (handshake). Occasionally the hongī is replaced by a kiss on the cheeks for a woman. Once this process is complete, the manuhiri are invited to the wharekai for a meal or a snack. The partaking of food between host and visitor is the last stage of removing the tapu (sacredness) from the visitor and making them noa (normal).

The hariru, hongī and kai (food) are not only rituals, they are another part of the information exchange process. While the greeting and eating are taking place, individuals are free to exchange information with each other. This can include individuals from both sides attempting to find a common connection, either through an ancestor or through another organisation like a boarding school, armed services division or a sporting club, or they could both be from the same area or iwi (tribe). The object

of this exchange is whakawhanaungātanga (networking), either by building on previous relationships or by finding some common ground on which to build future relationships. Common questions during this time would include 'Nō hea koe?' (where are you from), 'Do you know _____?' 'Did your uncle marry a woman from____?' 'Who was the headmaster when you were a boarder at St Stephens?' 'What year was that?' To some extent this is like Stanley Milgram's (1967) small world model, the longer the conversation and exchange of information can continue the more likelihood there is of a mutual acquaintance being found. Once a mutual friend or whānau member has been discovered, an exchange of information about that person and how they are related, and other details such as how other members of the same family have fared or how their whakapapa relates to a particular place or person are discussed. At various times, an individual who has revealed a particular fact or relationship may be informed that there is someone else at the hui who has a link to that person or place, and they will be either pointed out or introduced to them. Thus, some participants in these hui can be identified as 'connectors', due to their ability to process information about others and then retrieve that at an appropriate moment.

Students in the focus groups indicated that they were more likely to be on the receiving end of a lot of this banter. When asked why this was, one participant commented that he thought it was "*partly an age thing*" and he also thought it could be blamed on "*a lack of confidence or shyness*". Metge (1986:25) labelled these behaviours as belonging to the concept of whakama (shyness). Another participant in the focus groups described their behaviour as being more like a "*sponge*", in that they absorbed a lot of information which was shared with friends and whānau "*at an appropriate moment*".

The wharekai: not only a place of nutrition

The wharekai plays an important role in the marae as it is not only the place where nutrition and nourishment needs are fulfilled, but is also a

site where people congregate and converse, providing a natural information exchange channel.

As noted earlier, the wharekai and the food provided there play an important role in nullifying the tapu nature of manuhiri, however in many ways it is the hub of information exchange as people naturally converse while they eat together. Much of the conversation and information exchanged will again be in the style of networking and reminiscences about past events, friends, whānau and mutual acquaintances. These discussions will also cover other everyday activities such as work, health, sports, finances, politics, religion, television, movies, and music and weather conditions. The tone and tenor of the conversations will largely depend on those participating in them.

The kitchen

The wharekai is also a workplace, with the ringawera (kitchen workers) being an important part of the marae. It is the ringawera who work behind the scenes to ensure that everything can function properly at the front. At any one time during a hui there will be a contingent from the tangata whenua in the kitchen, ensuring that the next meal is prepared on time and in sufficient quantities. Depending on the marae, the occasion and the relationships, they will sometimes be joined by individuals from the manuhiri, particularly if they have a strong bond with the people of that marae. Others from the manuhiri will often feel more comfortable in the kitchen and will do what they can to help. Sometimes this assistance will only come after the meal has been prepared and served, for instance helping with the dishes. As with any kitchen that has many people working simultaneously, there is a routine to follow so that everything is prepared on time and to a high standard. This does not stop the exchange of information being full and frank. Often the more experienced ringawera will use the occasion as an opportunity to assist others with less experience. This might come in the form of them working with an 'apprentice', showing them how to prepare a dish and

work out the correct quantities of ingredients. These relationships are representative of the tuakana-teina (mentoring) relationship. At other times, the senior ringawera may act as overseers, observing and being ready to step in when necessary to save the mana of the marae (if anything looks like it will not meet the high standard they expect). As the ringawera are quite often in the kitchen for a long period of time, they do not always get to participate in the other activities of the hui, thus often relying on others who flit in and out of the kitchen to keep them informed about what is going on. People will often come in to help during breaks, and will update those in the kitchen of any key issues that have been discussed, who is present (particularly if they are well known) and what they have said, and what the response was from others to that speech. Other conversations and exchanges will revolve around whakapapa and history, especially if there has been some korero (talk) about ancestors and events that are in common between the manuhiri and tangata whenua. In some situations, a kuia who has stationed herself in the kitchen could be providing strict instructions to others going in and out about what should be said about a particular issue and why. The people that go in and out will also act as a source of information regarding the overall running of the hui, whether it is running to schedule or not, and the impact that delays may have on meal breaks.

Several focus group participants (all young women) indicated that they were regulars in the kitchen during hui, with the reasons for this being quite varied. One young woman indicated that she was there because her mother was there and expected her to be there as well. Another young woman from the same focus group indicated that she went there too, as the young woman mentioned in the previous sentence was her best friend and they did everything together. Another in the same focus group said that she stayed in the kitchen at her marae because it was the most helpful thing she could do, and because her grandmother and her grandmother's friends would spoil her if she was there. All three of these young women indicated that they were relatively passive when they were working and were more likely to absorb information rather than

initiate exchanges themselves. *“I just work and listen and sometimes if I stay quiet I will hear things probably not intended for my ears”* as *“some of the ringawera get quite noisy and start gossiping or running down others”*.

The hangi pit and the kauta

A kauta is a cooking shed and, before the development of modern marae, this is where a lot of the food preparation took place. These days kauta are few and far between, but at some marae they are still used as a space to prepare some of the messier / smellier dishes, shelling kina (sea eggs) and other shellfish, boiling fish-heads or smoking eels. Some modern marae use this area as a place to set up their grills to barbecue meat and other dishes.

On special occasions, the marae may be used to prepare a hakari (ceremonial feast), which will often act as the grand finale to the hui or tangi. This feast will often require days of preparation, with designated individuals being responsible for the gathering of seafood and other delicacies. A key feature of a hakari is the kai cooked in a hangi. Many marae have a pit where they lay their hangi and, although it is traditional to have a pit that is completely made of earth, some marae have opted to modernise their hangi pit through the use of gas fired cooking methods or concrete lined pits.

The preparation of a hangi can be quite labour intensive³⁹, resulting in the need for a sizeable number of workers to undertake the preparation

³⁹ When preparing a hangi in a more traditional style, a pit would be dug, a fire would be lit onto which stones would be placed for approximately two hours. Once the fire had burned through and the stones were thought to be hot enough, food in wire baskets lined with wet muslin material would be placed on Hessian sacks which cover the stones. Another layer of wet Hessian style sack cloths is then placed over the top of the food, with the dirt from the pit being placed on top. The hangi will steam for approximately three to four hours, before it is raised and served.

of the food, the fire, the pit and the stones. While all this is happening, discussions will also be occurring and this will include the exchange of information. Several of the male participants in the focus groups indicated, that given a choice, they would choose to hang around with the men at the cook shed or the hangi pit. One participant described it “as a mine of knowledge”, stating that they discussed everything from “politics through to racing and rugby”. He also described the atmosphere as “light-hearted” with “a large amount of teasing going on”. Other male focus group participants indicated that, from their experience, the type of information exchanged would often be quite practical, stating that this would often result in the older and more experienced men showing and telling them how to do things, such as “preparing the hangi” and “how to cut meat”. They also stressed that once the work was over, or if there was a natural break, there would normally be plenty of time to talk and play. The focus group participants indicated that topics under discussion varied depending on who was there, with safe topics⁴⁰ being frequent conversation topics. One participant stated his belief that these safe topics were discussed when the “men don’t want to talk in front of us”. When asked why? He said he thought it was “just a generational thing”. He also said that it was a good place to pick up information if “you just happen to be there at the right time”. Some of the conversations he had been privy to included: “marae politics, family disputes and stories about their social lives”. He indicated that he had shared some of these conversations with his family and friends, thus acting in a role as an ‘information carrier’ between the different groups.

The wharenuī & wharemoē

The wharenuī is frequently used as the wharemoē. When it is not being used for sleeping during a hui, it is where the discussions, presentations and debate occur. These will often develop in a semi-structured manner

⁴⁰ These topics were described as safe as they were ‘nothing’ subjects, some examples were weather, sports, racing, television

and will not always require tikanga Māori to be followed as closely as it is in other parts of the marae complex, although there are rules about who should sit or sleep where if this is required, particularly if there are kaumatua and kuia from the tangata whenua in the house. There are other strict formalities that should be followed if the hui is being held as part of a tangihanga and the tupapaku (corpse) is present in the house, including exactly where the body should be placed and where the whānau pani (bereaved family) should position themselves around the tupapaku.

The wharenuī is foremost a symbol of the marae's mana as it is often named after a tipuna (ancestor) (typically the primary ancestor of the hapu), and as such will also be called a whare tipuna. The whare is also a place of learning, as most houses are adorned with whakairo (carvings), tukutuku (latticed panels) and photos of deceased members of the hapu. It is quite normal for a hui consisting of mainly visitors to the marae to be told about the significance and history of the meeting house, carvings and panels by a marae kaumatua. In the process of this being explained the orator will, wherever possible, identify links between the marae and other hapu and iwi. If there is time, the orator will also relate the marae's history to that of the area that it is located in. All this information is important from the hapu's perspective, as it legitimises the hapu and enhances the mana of the marae. For those amongst the visitors with whakapapa links to the marae, the information shared by the kaumatua can potentially be identity-enhancing, and being exposed to these stories can lead to them re-establishing their place and that of their whānau within the hapu community. They will also be in a position to share this information with other members of their whānau who are not present at the hui.

Depending on the occasion, mihimihi (informal greetings) will take place, and this normally involves everyone in the wharenuī introducing themselves, where they are from, what iwi they belong to, where they work or study and their reason for coming to the hui. This is also a chance for

the hui to raise any issues that they would like to see addressed during the hui. Again, like other encounters that occur within the precincts of the marae, the mihimihi results in connections being made between through whakawhanaungātanga and, as each speaker rises and identifies themselves, there can be an orchestra of 'kia oras' (informal manner of greeting) from others present who recognise the speaker as being from the same iwi, or a well known institution or family. The information given in a mihi (informal speech) will often spark conversations and information exchanges, as those who feel a close connection to the speaker will try to establish the exact nature of their relationship.

If the visitors are present due to a tangihanga, most often the speeches will be focused on the relationship between the deceased, and the person that is speaking and their whānau. Although this is solemn time, there can also be large doses of humour as past exploits, achievements and relationships are outlined. The whānau pani and other mourners will learn more at this stage about the impact that the deceased had on other people's lives, and will hear stories that fill in some of the gaps in their knowledge about the deceased's life. This information will be shared with those who are absent or working in another part of the marae.

In each of the focus groups there were participants who made comments about how valuable mihimihi sessions had been for finding out more about different iwi and hapu, and how they relate to their own iwi and hapu. One participant noted how she had "*found out more about the links that my hapu and iwi have with the rest of Tainui and why our tupuna moved south*". Another participant indicated that she had met whānau through "*their mihimihi, which was almost the same as mine.*"

When the wharenuī transcends into a wharemoē, individuals will identify and mark their sleeping place, firstly with a mattress and then their possessions. Like any communal sleeping arrangement, people will try and position themselves close to others they know. To some degree this

is because of the nature of their friendship or relationship, which means that they will feel more comfortable sleeping near them than they would to someone they do not know so well. If the latter should happen then it will be coped with and it could become the beginning of a bond between those who are involved. It can also mean that there is more scope for information exchange between people who do not know each other so well, due to the fact that they will probably have access to a chain of information not normally available to them. This is in keeping with the strong tie-weak tie concept that Granovetter (1972, 1983) promotes in his work. There was confirmation of this in the comments that several focus group participants made, including one student who stated that he had found out about an education grant he might be eligible for from someone he had spoken to in the wharemoa. This had occurred because *“we were talking about links to different blocks of land and when I told them about my parents having shares in the _____ Block, she told me about the grants they had available and the process for applying for them.”* Another student mentioned that he had met someone with the same taste in music and this had led to them *“discussing different groups we liked and what [music] they have put out and where they are from”*. Similarly, a female student indicated that she and three others had *“talked all night about fashions, TV, movies and gossip and stuff”*.

Mahau

The mahau is the veranda area just outside the meeting house. After the formalities of the powhiri are over, and if the weather is warm, this area will often be populated by tangata whenua and manuhiri alike. Quite often the people here will be kaumatua or kuia. The conversation will typically revolve around current events, whānau, historical events, previous hui, whakapapa, what was said in the whaikorero or other everyday topics such as health, television, or politics. The nature of the information exchange will depend on who is there, whether someone is 'holding court', how many are there, the occasion and the age of those gathered.

When asked about this area in the focus groups, most present admitted that this area was mainly the domain of kaumatua and kuia and, they (the students) would only linger there when the elders were not around. One function that this area has is the depositing of shoes before people enter the whareniui. The students indicated that this would be the time that they would be there and conversing with others. Again, most of these conversations would be about “*what had gone on in the powhiri*”, “*what’s going to happen next*” and “*where shoes had come from and how much they cost*”. These students also indicated that conversations between them and their friends were more likely than not “*to focus more on everyday things*” as well as “*personal things*”.

The students also stated that if they did not know the other person very well, then the conversations and the information that is exchanged would be about “*establishing connections*”, either through “*whakapapa or other common links, such as sports or school*”. As mentioned in the earlier examples in this chapter, this is commonly referred to as whakawhanaungātanga, with small snippets of information being exchanged until a mutual acquaintance or family link is established or identified.

There can be many conversations taking place in the mahau at the same time, and the seasoned mahau ‘occupant’ is normally able to monitor the multiple discussions (with a trained ear) and launch an opinion where necessary. Sometimes the conversation will all be in English and sometimes in Māori. However it is not unusual for both languages to be used at the same time on the mahau, and it is also not uncommon for any single conversation to be conducted in a mixture of the two languages. The students in the focus groups who were more fluent in speaking or understanding te reo Māori stated that they would sometimes be able to pick up on conversations taking place between elders and others on the mahau by eavesdropping, and they would

normally share this information with their friends and family (when appropriate).

The wahi-paipa

Over the past ten years there has been a concerted effort in Māori society to reduce the impact of smoking. This is mainly due to the impact that smoking has on the health of individuals, with Māori having one of the highest ratios of deaths from lung cancer in the developed world. Some marae committees have declared their marae 'smoke free' in an attempt to discourage smoking, while other marae have designated smoking zones within the marae precincts. The implementation of these policies has largely resulted in smoking areas being placed in secluded spots so those smoking are isolated from those who do not smoke. At marae that are smoke free, this means that those wishing to smoke either need to abstain or leave the premises. The marae that allow smoking in restricted areas will see an eclectic range of people being thrust together in these places, and this will naturally result in conversations and the exchange of information. Only a few focus group participants admitted to smoking cigarettes on a regular basis. The students who did admit to smoking identified spots around their school where they smoked (see the chapter on the information grounds found at school) and indicated that on occasion they would smoke when they were at a marae (if they had the opportunity)⁴¹. They stated that when they did have the opportunity, they would often find themselves sharing the smoking area with individuals of different ages, and more often than not with both visitors and people from that marae. Like many other conversations occurring around the marae, these discussions would revolve around everyday topics such as "*food, weather, health issues, work, school, sports*" and more culturally focused topics such as "*whakapapa, what was said in the powhiri, meaning of words in waiata or*

⁴¹ It was explained by one of the students that they would not always smoke at marae, and often it would depend on who else was there (as they would not always smoke if teachers or their parents were present).

other te reo Māori terms". Another student related that he would often hear "stories about the marae and its history or people, including my whānaunga (relations)" from kaumatua who were smokers. Another student said "one koroua (elder) would tell us stories about the Māori Battalion when they were overseas".

Rahoroi (bathrooms)

The ablution blocks at marae are normally adjacent to the whareniui and have separate facilities for men and women, with both containing showers, wash basins and toilet facilities. Although the peak usage times of the showers will normally be before breakfast and at bedtime, they will be used frequently throughout the day, particularly if there is a hui taking place in the whareniui. Like other bathrooms in facilities that have a communal nature (such as schools, gymnasiums and sports changing sheds) there are various times when a queue will form. This, like many other information grounds, will inevitably lead to discussions including the exchange of information between those waiting. In the focus groups, several of the participants indicated that they had experienced this and these conversations could range from the "state of the weather", "whakapapa discussions"; "tikanga"; "waiata lyrics"; "who was snoring and where in the whare they are sleeping" and "how to get the hot water working properly".

One advantage of the bathroom facilities is that it brings together different age groups and places them in a situation where they are relatively vulnerable and more approachable, thus leading to discussions. A focus group participant related his experience of obtaining careers related information as a result of a discussion in the bathroom about "what my plans for next year were, with _____ that I was talking to telling me about a course that I could take at the Wa[nanga] which could help me". Other participants were able to relate similar incidents where they had spoken to someone they ordinarily would not dare approach, but had struck up a conversation and had

received information that was helpful. Some of these examples included a student who had found out “*historical information about my hapu and how the two main families were related*” and another who had learned more about “*the local branch of the Māori Womens’ Welfare League*”. Although these bathroom encounters had been unplanned and short-term in nature, the participants indicated that as a result they had fewer qualms about approaching these same individuals elsewhere around the marae.

The students indicated that they were often the information givers and not the receivers, and that this led to them sharing information with elders about subjects such as musical preferences, school matters and sport.

The modern marae complex

Many modern marae will have additional features that are not always present at some of the more traditional marae based in rural centres. Marae based in cities can also have papakainga, quite often reserved for kaumatua and kuia; health centres which have their own doctors, nurses, counsellors and social workers; and classrooms (particularly marae at educational institutions). However, as these facilities are not universal to all marae and beyond the experience of almost all of the focus group participants (except for one student who had visited a medical practice at a marae when they had been home from school), they have not been included.

Key informants

As a community (albeit predominantly Māori) facility, the marae attracts a diverse range of individuals of all ages fulfilling a variety of roles in the different information grounds that have been identified within the marae precincts. Although the dynamics of information exchange vary from

ground to ground, the evidence from the focus groups indicated that there are some trends with regard to key informants across the spectrum. Amongst these key informants are kaumatua and kuia who, as the elders of the marae, have experienced and possess knowledge of the history of the marae, and have participated in the range of activities that take place within its precincts. Although generation gap issues can at times be a feature of these exchanges, the nature of Māori values means that respect is given to elders. Even when elders are not participants in the different information grounds, respect is paid to those who are senior to others. If these situations are a learning experience then partnerships become a feature, in that a tuakana-teina relationship develops. This can be seen in the areas where work is involved such as the kitchen or the hangi pit, where a more experienced individual will instruct and assist those with less or no experience to develop the knowledge or skills to be able to perform the tasks in question. Although the tuakana-teina relationship is important in terms of skills development, this does not always mean that the information exchange is necessarily just one way. The teina may make their own unique contribution to the exchange, whether it is in the form of everyday life focused information (e.g. education, health, finance, employment, etc.) or gossip, therefore introducing an element of reciprocity into the information exchange.

Whānau

The other major cultural influence on Māori teenagers is their whānau. The definition of whānau is associated with the family unit, with Mead (2003:212) stating that the whakapapa principle means that rightful members of a whānau are those who “are born into it and that the members are all relatives”. The whānau unit is the smallest of the common Māori social structures (whānau, hapu, iwi) and normally consists of three or four generations of one family (grandparents, parents and children).

Durie (2004:13) identifies another type of whānau, those that come together for a common mission. He identifies kindergarten whānau, whānau support group and team-mates as examples of these whānau, and as they are not composed on whakapapa lines they are more commonly referred to as kaupapa whānau. However, this chapter focuses predominantly on the whakapapa whānau.

In traditional times, a whānau was more than likely to live under one roof, but this is no longer as prevalent and Durie (1997:21) identifies while that *“two-parent families remain the most frequent, a plurality of forms exist and to a greater or lesser extent fulfil the functions of familyhood”*. Durie also notes that the reality is that many modern Māori households and whānau are affected by divorce, de-facto relationships, solo parenting, reduced fertility rates, urbanisation (causing a separation of generations) and ageing.

Another common feature of the Māori households attached to this study is that just under 40 percent (54 out of 139) of them included one parent that was not identified as Māori. This trend is also reflected in a study by Callister (2003:98-99) on Māori and non-Māori intermarriage, which found that approximately half of Māori who had partners indicated that their partner did not claim Māori ethnicity.

The focus group participants identified their immediate and extended whānau as being key influences in their quest for information about tikanga Māori and other cultural issues. Unlike other information needs associated with school work, the comments from the focus group participants indicated that there was a high dependence on whānau for this type of information. The types of information sought included whakapapa, te reo Māori, assistance with tikanga, karakia (prayers), waiata (sung poetry), whaikorero and karanga.

Parental guidance

The focus group discussions regarding the cultural knowledge of parents and their value as informants ranged from parents who were considered by their children as not having any knowledge, to those who acknowledged that their parents were experts and therefore extremely helpful. The participants indicated that there were a number of issues regarding the amount and the value of advice and information that they were able to receive from their parents. One of the main issues identified by several of the participants was the fact that their parents did not have much knowledge with regard to whakapapa or tikanga. When asked why they thought this was the case a range of answers were given, including the fact that they thought their parents had not had the opportunity to learn about their connections as they lived separately from other whānau or from their iwi. Others commented that their parents had never seemed that interested in Māori issues or their own origins and in some cases seemed to have made a deliberate decision to not engage with things Māori. A few students indicated that their parents were separated or divorced and they did not live with the parent that was Māori, and that this made it difficult at times to get information from that parent.

When asked in the focus groups which parent they preferred to ask for information,, the results revealed that over two thirds of those who indicated a preference (21 out of 29) preferred to ask their mothers. Other group members indicated that they would normally ask which ever parent was available at the time.

However, comments made by participants also indicated that when neither of their parents knew what the students needed to know, they would try to find out from their parents who else in the whānau might have the knowledge necessary to help with their information need.

Siblings

Siblings are one of the core components of the whānau, however from the comments made by the students in the focus groups and the results from the surveys it was obvious that they were not rated highly as sources of general information, let alone cultural information to do with tikanga Māori and whakapapa. This was particularly the case when the siblings were a similar age or younger. At one of the boarding schools, the participants indicated that if a younger sibling required culturally based information (or any type of information) they were unlikely to ask an older sibling even if they were at the same school, and would either contact another whānau member or their parents. The students explained that this was more to do with the protocols about contact, communication and information flow between the different year groups (as discussed in the chapter on school information grounds).

Whānau assistance

The students in the focus groups indicated that if they required additional assistance above and beyond what they received from their parents, they approached other members of their extended whānau including grandparents, uncles and aunts, and cousins. Some of the comments from the participants indicated that they knew which whānau members had knowledge about tikanga, whakapapa, or aspects of family, hapu or iwi history. Typically these whānau members lived in separate households, and this would normally require the participant to initiate contact. For the three focus groups that were made up of pre-dominantly hostel students, it was indicated that this contact would be mainly during breaks from school or, in special instances, by phone or email.

Information transmission

Unlike the marae, social and school settings, the transmission of information within a whānau is less focused on 'information grounds' and

is typically more direct in nature. That is, the information seeking is a deliberate rather than an accidental occurrence as can be the case in the information grounds. However, it is always possible that when this deliberate behaviour is occurring, supplementary information will be provided and this in itself is an information ground characteristic. It was obvious from the focus group discussions that the type of cultural information that was shared in these situations was quite specific, and normally related to identity indicators, cultural behaviours and philosophies, or was historically focused.

Although the students admitted that at times it was difficult, they stated that this type of information needed to be sought *kanohi ki kanohi* (face to face) rather than by email or telephone. As such, they had to initiate the contact with their *whānau* when they required the information. The students at boarding schools indicated that this meant that they had to wait until they were on home leave. Several of the students who were not at boarding school also stated that they did not always have easy access to their wider *whānau* or the key informant/s, because they did not live in the same city.

An interesting trend that emerged from the focus group discussions was that those students who had an information based relationship with their *whānau* did not restrict their questions or information quests to culturally focused information. They also used these connections to assist them with other information seeking topics including careers related advice, health issues and assistance with their homework. There were several comments made about this. A participant at one of the co-educational school stated that she asked for help from her aunt and uncle because *“they had both been to university and were very smart”*. Similar comments were made by participants in other groups, who were able to identify key individuals within their *whānau* who were *“knowledgeable”* and / or *“helpful”*.

Identity indicators

When defining Māori identity, Durie (1998:197) stresses that there are four clear indicators that demonstrate the degree of awareness. These factors are knowledge of tribal affiliation, whakapapa, cultural behaviours and te reo Māori. The fifth and arguably the most important identity factor relates to self-identification as Māori.

Although individuals' physical attributes may see them resemble Māori, Durie (1995) (cited by Cunningham, 2004) identifies three levels of identity engagement. The first level is *conservative Māori networks*, which involve children attending Māori educational institutions, comfort in a marae setting, membership of a cultural group with knowledge or understanding of te reo, involvement in Māori sports teams and attendance at tangi (funerals). The second group is identified as having *limited association* with Māori society, and will by and large be integrated into mainstream New Zealand society. Although their lives might not differ much from their Pākeha neighbours, they will resist any insinuation that they are not Māori. Durie's final group is those who choose *not to access* any form of Māori or mainstream institutions or services, including not sending their children to preschool education, never visiting marae or libraries, belonging to a sports club, or attending a polytechnic, effectively isolating themselves from Māori and mainstream society and services, while maintaining vehemently that they are Māori.

Cunningham (2004:12-13) adds a fourth level which is called the "*new Māori*", that has arisen from the *Te Hoe Nuku Roa* research at Massey University. Cunningham describes new Māori as "pluralistic" and characterises them as the "Māori middle class"; he comments that this group "*is comfortable in both mainstream New Zealand and the Māori world with outcomes that are relatively better than many of their fellow Māori and Pākeha peers*". Although the term "new Māori" is unattractive, if not plainly patronising and a pejorative expression comparable with the

terms “bounty bar”⁴² or banana⁴³ implying a shallow or materialistic commitment to Māori society, it is obvious that some Māori are able to live comfortably in a bicultural world.

The information sought that was related to identity varied according to the cultural competencies of the seeker. Perhaps the most telling aspect of the data collected at the four schools was that, at the two predominantly Māori schools, the participants strongly recognised their Māori identity, while at the two schools where Māori students were not in the majority, the students’ recognition of their own Māori identity was less pronounced, with several students at both of these schools being reticent when it came to discussing identity issues. This was particularly apparent from the identity questions in the survey and these students’ lack of participation at the times during the focus groups when Māori information and identity issues were being discussed. This may be partly attributable to the influence that being in a Māori focused school and co-habitation with fellow students in the hostels had on leading to positive and peer reinforcement of Māori issues and identity.

The following chart represents the major differences in the knowledge of whakapapa between the two different school types with regard to knowledge of their own whakapapa, with the results being relatively equal when identifying who is in their immediate family and the parents of their own parents. However, it is obvious that those based in a Māori focused school have far superior knowledge of their whakapapa, back at least another two generations beyond their grandparents’ generation.

⁴² Brown on the outside, white in the middle.

⁴³ Yellow on the outside, white in the middle. Used by immigrant people of Asian descent to describe NZ born Asians

Degree of Whakapapa Knowledge	Māori focused	Mainstream school
Own family	65	68
Grandparents Maternal	62	60
Grandparents Paternal	59	60
Great-Grandparents Maternal	40	28
Great-Grandparents Paternal	26	18
Great-great Grandparents Maternal	25	08
Great-great Grandparents Paternal	18	09
Great-great-great Grandparents Maternal	12	09
Great-great-great Grandparents Paternal	09	04

Table 2: Comparison of Students knowledge of their whakapapa

The other identity factors covered in the questionnaire included spoken and written competencies in te reo, knowledge of iwi affiliations and engagement with marae.

The level of competency in te reo was similar between the two different modes of engagement with the language.

Te Reo Ability	No more than a few words or phrases	Poor	Fairly Good	Good	Very Good
Speaking	44	29	27	21	17
Understanding	33	23	37	23	21

Table 3 : Te reo Māori ability of all students – all schools

However when these results were analysed from a school's perspective it became obvious that those at the Māori focused schools were more competent in both areas (speaking and comprehension) than those at the mainstream schools as illustrated in the tables underneath.

Spoken Te Reo Ability	No more than a few words or phrases	Poor	Fairly Good	Good	Very Good
Māori	08	17	18	12	13
Mainstream	36	12	09	09	04

Table 4: Spoken te reo Māori ability by type of school

Understanding Te Reo Ability	No more than a few words or phrases	Poor	Fairly Good	Good	Very Good
Māori	05	09	26	14	14
Mainstream	28	14	11	09	07

Table 5: Understanding of te reo Māori ability by type of school

Counting the frequency of visits to a marae demonstrates that those at the non-Māori focused schools, with a few exceptions, tend to either not visit a marae or visit on a yearly basis. Those at the Māori focused schools visited much more frequently, but as it was pointed out at the focus groups at these schools, they did not always get the opportunity to visit their own hapu marae and their marae visits would be to other marae.

Frequency of visits to Marae	Māori Focused	Mainstream Schools
Never	01	20
Daily	03	01
Weekly	09	02
Monthly	19	08
Yearly	15	26
2-3 times per week	00	01
3-4 times per week	01	00
2-3 times per month	07	01
3-4 times per month	02	03
2-3 times per annum	04	03
3-4 times per annum	03	03
4-5 times per annum	04	00

Table 6: Frequency of visits to marae by students

The other identity focused measure was the knowledge of their iwi. The questionnaire asked the students to list the iwi that they affiliated to. Over 279 responses were recorded, with the following showing that many of the 126 students who listed an iwi listed more than one, with the other interesting aspect being that thirteen students could not list an iwi they were affiliated to.

Iwi affiliations	Number
None	13
One	38
Two	42
Three	27
Four	12
Five	03

Table 7: Number of iwi affiliations of students

The influence of cultural identity on information seeking

The students who showed high levels of competency in te reo and tikanga Māori indicated that they were more likely to seek information clarifying aspects of their whakapapa, and / or the connections between their whānau or hapu and others.

The students who were less sure of aspects of their identity indicated that the types of information they had asked for were to do with their whakapapa, information about their pepeha (identity chant), including the essential information about their mountain, river, waka (canoe), marae, hapu, iwi. Several focus group participants indicated that they knew some of these but had had to find out about and learn all of them so they could identify themselves in a manner that was culturally appropriate.

The students at the boarding schools indicated that it was important in their environment to know their key cultural indicators, and that any students that did not know their pepeha and whakapapa were strongly encouraged to learn them by their fellow students and teachers. When

asked to explain why this was the case, they and other members of the focus group indicated that this was part of the 'tribal pride' that was a key characteristic of their school. This was related to the expectation that the students would uphold and enhance the mana (status) of their hapu and iwi. In keeping with this, the focus was less on Māoritanga (Māori culture) and more on iwitanga (tribal culture), for example Ngati Porou-tanga, Tuhoe-tanga or Rangitane-tanga.

Discussion

The data collected from the questionnaire and focus groups demonstrated that there were three profound influences on the information behaviour of students when they were in a cultural context. These three factors were the marae, the whānau and the degree of self-identification as Māori. Not all of the participants in the questionnaire and focus group phases were as well grounded in all three of these areas, and indeed there were participants who were very weak in their knowledge and participation in all three of the factors.

Each factor in its own right could be considered to be extremely complex, and even those participants who were involved in all three areas would have varying degrees of competency or engagement. Although they were all enrolled as senior students at their schools, it would appear from the results that the students from the pre-dominantly Māori schools were more likely to have a higher degree of cultural identity than those at the co-educational schools. This may indicate that there was a higher degree of motivation for these students to seek this information due to the expectations of not only the school but also their fellow students, particularly those who were members of the same hapu or iwi who would expect them to uphold or enhance the mana of their hapu / iwi.

Those students who had a strong link to their own⁴⁴ or another marae were able to witness and learn from not only the cultural experiences they were exposed to, but also the everyday life events in the different components that constitute a marae complex. The marae is a diverse place that brings together Māori and other peoples together and as such provides limitless opportunities for these people to converse and exchange information. Although there are set protocols in place, the encounters can be relatively informal in some areas of the marae. As rangatahi (youth), the role played in the formal aspects of the rituals that occur on the marae is relatively limited, with the main duty being to support those who are charged with enhancing and maintaining the mana of the marae (or their whānau if they are visiting). As such, they are passive actors and the conversations, speeches and actions they bear witness to can be seen as learning experiences and an opportunity to develop their own knowledge bases. The type of knowledge they are exposed to will depend on where they are and who is there. Some of this information is practical in nature, especially in the kitchen and out at the hangi pit. Other information shared or exchanged can be seen as ego or mana enhancing. This may include information relating to whakapapa or historical feats or events, and those who are present or are active participants are consequently exposed to new information about the marae and its facilities, or their relationship with others. These educational sessions will not necessarily be planned but will occur where there is an active group of participants and willing conversationalists. Not everyone will participate, but there is an active information exchange network occurring nonetheless, as some of the more active 'information carriers' move from group to group, passing information from one to the other.

A key aspect of any information exchange in a marae or other Māori cultural setting is whakawhanaungātanga. The notion that links between whānau, hapu and iwi can and should be established is a vital dimension

⁴⁴ Where they have a whakapapa link

of the social networking framework that is a cornerstone of Māori society and culture. It is therefore normally a common interest between all those who are present and is inextricably linked to identity. Although at times there will be encounters with individuals who are not so well known to them or their whānau, it would be wrong to label them as 'weak ties' in the sense used by Granovetter (1973) as this could be construed as not being mana-enhancing. However, like Granovetter's 'weak ties', these individuals are typically a rich vein of information, particularly if they present a view of the relationship between themselves or the group or place they are affiliated with. The act of discussing or informing others of this perspective will contribute strongly to them becoming part of the marae. Thus, in a Māori sense they could not be labelled as a weak tie as, because from a Māori worldview all people are descended from Ranginui and Papatuanuku, these individuals must be considered as whānau.

Marae have stood the test of time and colonisation, and although they may have changed dramatically in the period since western contact in the late eighteenth century and settlement in the early to mid nineteenth century, they have retained their authenticity in terms of their role of bringing people together and providing a venue that allows Māori just to be Māori. As a home away from home for the tangata whenua, the marae is consistent with the 'third place' concept promoted by Ray Oldenburg (1989).

Due to the size of some marae and the many different gathering points within, it is more appropriate to identify them not as a single information ground as defined by Fisher (2005), but as one place that provides the opportunity for several information grounds to occur simultaneously, thus creating a dynamic, evolving information world.

As such, the communication between the different groups gathering is organic and largely depends on individuals who participate in more than one information ground being the 'information carrier' or the bridge

between the different groups. Whether these individuals should be described as gatekeepers in line with the writings of Shoemaker (1991), Agada, (1999) Metoyer-Duran (1993) is open to question, as it is possible that they will filter information, intentionally or not, and not share everything they have been privy to when they have shifted from one information ground to the next. However their role provides the dynamic that is required in some of these groups to keep them from 'information implosion' or the small world phenomenon that was explored by Elfreda Chatman (1991, 1992, 1996, 1999) in her studies of the information worlds of janitors, retired women and prisoners.

Marae themselves will continue to evolve, as is already evident from the addition of housing, health clinics and social services functions, and as such they should also continue to develop as rich sources of information, whether it be cultural or everyday life issues under discussion.

In a similar sense, whānau can be considered to be a micro-marae in that many of the functions of the marae often can be replicated in the whānau home. Although it is not often that the more formal rituals associated with tikanga Māori carried out on the marae are undertaken, it is not uncommon for hui and tangihanga to take place. Although definitions and manifestations of whānau vary between close and extended family, and those whom one shares a common interest with, the principle of whānau involvement is that there is an expectation that support and assistance will be provided when required by whānau members. Although the level of this support varies and will not always include financial assistance, at the very least the collective knowledge of the whānau members should be available to all those who belong. This would also ordinarily include the networks the whānau members are part of.

Therefore, to all intents and purposes it might be thought that information about whakapapa and tikanga Māori are the glue that defines the whakapapa based whānau and affirms its mana. However, in reality,

although these are important from an identity focused perspective it should be recognised that, due to the diversity of talents within a whānau, the potential for a potpourri of information channels and networks exist. This diversity provides members of the whānau with the ability to seek information from sources within the whānau who will not only assist them culturally, but also provide the potential to access information that will assist in everyday life needs such as education, health, career prospects, or financial advice.

In a similar manner, the kaupapa based whānau provide the same opportunities, however these type of whānau can be quite one-dimensional as they have been developed around one particular purpose. As such, the full resources of the whānau members' knowledge and access to a wider network are not necessarily going to be available to all whānau members and their whakapapa whānau. Another characteristic that sets the kaupapa whānau apart from the whakapapa whānau is that membership is not necessarily for life and members may come and go.

Teenagers, such as those involved in this project, are not always going to be able to utilise the information that kaupapa whānau members have as they may not be personally involved in their affairs. Therefore, if a teenager is seeking information from whānau that is of a cultural nature they will typically be seeking it from a member of their whakapapa whānau. There will be exceptions to this and examples were provided by those in the focus groups; amongst the kaupapa whānau based situations mentioned were kapa haka (performing arts) groups, sports focused groups and church groups. For the teenagers involved in these types of whānau, the amount and the quality of the culturally focused information will depend on who else is involved in them and what part they choose to play.

Conclusions

This chapter has identified six significant findings that aid our comprehension of how Māori students access, share and exchange information that assists them in developing a stronger understanding of tikanga Māori and their own cultural identity. The first finding from the research data analysis establishes that the information obtained in cultural situations strengthens an individual student's link to their whānau, hapu and iwi.

The second finding of significance is that the principal sources of this culturally enhancing information are from within the students' own whānau and through inter-personal interactions with, or by passively observing, key individuals in strategically important positions at the marae.

The third key finding is that students receiving information whether in an active or a passive manner will at times become 'information carriers', by relaying what they have learnt from these situation to situations they are in with friends, fellow students or whānau. These other situations will not always be located within a cultural setting.

The fourth key finding is that students who do not have an active connection to a marae are heavily reliant on whānau when seeking or receiving culturally focused information. However, it was also discovered that not all of the students were able to access this information in their own home due to complications of modern family composition (such as sole-parent families). The cultural information they seek may be supplied by members of the wider whānau or, if available, an informed member of a local marae. An important part of these information transactions and interactions is the use of common values firmly entrenched in tikanga Māori, including the principles of respect, humility, legitimacy and reciprocity.

The fifth key finding is that the students who attended Māori focused schools had a higher sense of their own cultural identity, and the information associated with affirming this sense, than those at the co-educational schools. This may, in part, be due to the expectation that students at the Māori schools require this information to assert their personal mana and that of their iwi. The expectation of their fellow students and teachers means that this information becomes ingrained from the earliest stages of their attendance at their schools. This level of reinforcement did not seem to have the same level of importance at the co-educational schools.

The sixth and final key finding is related to Granovetter's theory of weak ties and the whānaungatanga value. Although Granovetter labelled people who are not well known as weak ties and therefore strong sources of new information, in a Māori environment, calling these individuals weak would not be seen as acceptable and definitely not mana enhancing. Whakawhanaungatanga involves the creation of links between individuals, whānau, hapu and iwi through whakapapa, so from a Māori worldview, all individuals are descended from Ranginui and Papatuanuku and as such we are all whānau, regardless of how close or distant the relationship is.

Chapters Five to Seven have provided information about how Māori students share and exchange information in a variety of settings, and Chapter Eight now shifts the focus to describing the barriers that Māori students encounter in the process of seeking information.

Chapter Eight

Information barriers

The three previous chapters have focused on the places where and the information content that Māori students seek, share and exchange. The purpose of Chapter Eight is to address the two research questions relating to the role that Māori identity plays in information seeking behaviours, the information barriers that Māori students encounter and whether these barriers vary according to the cultural context that the information is being sought in.

As demonstrated in the literature review in Chapter Three, there has been very little written about the information seeking behaviours of Māori. The literature focusing on information barriers is even more limited, with only one substantial item published by New Zealand's Ministry of Consumer Affairs in 2003, and some secondary references in reports prepared by Auckland City Libraries (1995, 2001) and Manukau City Libraries (Szekely, 2002).

Information barriers and libraries

A study of Māori and their satisfaction levels with library services by Auckland City Library in 1995 found that Māori encountered several barriers which affected their ability to access the services on offer. These barriers included the environment being unfriendly (too Pākeha (European)), libraries lacking Māori staff members, perceived difficulties in finding Māori items and having experienced poor customer service. A follow up study was conducted in 2001, with many of the same issues from 1995 still present. The percentage of those feeling uncomfortable, however, had fallen from 33 percent to approximately 20 percent.

Szekely (2002:51) highlighted the major differences between users and non-users in a survey of Māori in Manukau City area; this study indicated “that Māori that were younger, better educated and more attuned to their culture were more likely to use libraries”. Non-users of the Manukau Library were characterised as being reluctant due to “uncertainty over the use of technology, poor reading ability, and a disinclination to ask for assistance”.

The Consumer Affairs report (2003) identified information barriers encountered by Māori women. These included government agencies being perceived as unfriendly to Māori, and information overload experienced by impoverished Māori who can only process information relevant to providing the most basic needs of providing food and shelter for the whānau (family). The focus group participants listed other barriers such as having to leave messages, phone message services (e.g. voice mail) instead of human interaction, not being able to express themselves properly, jargon and lack of reading skills. Rural Māori women identified that service and transport deficiencies limited their access to some types of information; although the internet was identified as a good source of information, issues regarding telecommunications service to remote areas limited its overall value.

Research undertaken by Tamaira (2007) looked at the information seeking strategies utilised by Māori searching for whakapapa (genealogy) information in public libraries. In the section that focused on using the library catalogue, her survey highlighted frustrations that the respondents had experienced. Reasons for not using the library catalogue included *“I can’t figure out how to use it, I don’t know what words to use to do my search, I can never find what I want, I prefer to browse the shelves, the catalogue doesn’t “understand” Māori words”*. In another section of her thesis, Tamaira pointed to the possibility that Māori whakapapa researchers lack sufficient information literacy skills and that this limited their ability to use various indexes and bibliographies to their full potential.

The specific research question that this chapter focuses on is number five, what information barriers exist for Māori students and do these vary according to the cultural context?

Questionnaire results

The question on information barriers presented a list of possible answers to the participants, and provided an opportunity for them to state other barriers they had identified that were not already on the list. The participants were invited to tick as many as they thought were applicable to them. Overall, 373 responses were received to this question, with only eight of these responses falling into the 'other' category.

The results from the questionnaire revealed that the biggest barrier faced by survey respondents was that the information they required was not always available (61 responses), followed closely by the perception that the information they received was not always accurate (50 responses) and that they could not always find the information they were looking for (49 responses). At the lower end of the scale the lowest figure was recorded for "People don't always want to help me (16 responses), followed by "Don't like to ask questions" (22 responses) and "Don't have access to computer and internet facilities (27 responses).

The eight responses in the 'other' category included an equal number of intrinsic and extrinsic reasons for experiencing barriers. These included:

"don't always know whether the information I have received is the best"

"Access to some [internet] sites is forbidden"

"I'm not good at talking on the phone. I don't always ask the proper questions to get the information I need"

"I lack motivation"

“No time” (to seek information)

“some people act as [if] they know things when they don’t”.

Information barrier	Number of responses	Percentage of overall responses
The information is not always available when I want it	61	16.35
The information I get is not always correct or accurate	50	13.40
I can't find what I'm looking for	49	13.15
I don't know what information is required	43	11.52
I don't know what information resources are available	37	9.91
I don't like asking for help	30	8.05
I don't know how to identify relevant information sources	30	8.05
I don't have access to a computer and the internet	27	7.23
I don't like asking questions	22	5.90
The people I ask don't always want to help me	16	4.30
Other	08	2.14
Totals	373	100 percent

Table four: Information barriers encountered

The focus group results

The barriers that students encounter was only one part of the discussions held in the focus groups, however a broad range of themes emerged from the views shared. Predictably, many of these themes mirrored issues already identified in the questionnaire.

Interpersonal information seeking

The focus group participants agreed that seeking information from each other, their families, other close friends and other personal contacts (teachers, kaumatua / kuia (elders), ministers / pastors etc) was one of their strongest forms of information behaviour, as there was an expectation that these individuals would have a better understanding of their needs. There seemed to be a reluctance to go outside their trusted circle of contacts, even if there might be some personal advantage in it for them such as assistance with particularly difficult schoolwork. *“Even though I get on with him quite well, I wouldn’t ask him for help because he doesn’t belong to my group of friends and I wouldn’t want him to think he could hang around with us”.*

Three focus group participants emphasised the need to trust the people you asked as it would be disrespectful not to do so, even if you found out later on from someone else that the first person was wrong. This was illustrated by one student who provided the following example of this happening to him: *“I asked my teacher what my pepeha [identity chant] should be and he helped me put it together, but later on I found out he was wrong when I asked my cousin”.*

Although close family and whānau members were acknowledged as good sources of information by most of the students, very few agreed that they would seek them out for information about matters that they felt embarrassed about or wanted to keep secret. These types of information quests were either pursued through discussion with friends

or, if it was really secret, through an internet source or using resources in a bookshop or library.

If the matter was considered less personal or embarrassing, asking whānau members was normally okay. However, identifying or getting access to the right person was not always easy. This in itself could be a major cause of frustration and in some cases could end in an information seeker abandoning their quest.

In discussing the role that their parents play in their information seeking queries, it was made clear by a number of students that they did not always approach their parents in the first instance. The reason for this varied, however the main themes that emerged from the data centred around the students' perceptions of their parents' lack of understanding of some of the issues that they needed assistance with. In some cases this was attributed to the fact that they felt their parents had a limited view of the world; their parents were not educated to a level that would allow them to assist them, particularly with maths, science and English homework, while for an extremely small minority there was a feeling of alienation between them and their parents. When I explored this last point in greater depth I discovered that, in two out of the three cases, this was due to the fact that their parents had separated and had new partners. The dynamics of family life had as a consequence changed, and these students were not close to their biological parent and had no affinity with their step-parent.

For those participants who were still in traditional family units, it was revealed that, if they were seeking information from their parents, three-quarters of them would ask their mother first rather than their father. The two main reasons for this seem to relate to the fact that, firstly, they felt their mother was more approachable and, secondly, their mother was more likely to be readily available than their father. Interestingly there was no clear gender division on this, with boys just as likely as girls to ask their mothers.

Related to the views on the merits of their parents as sources of information, several of the participants indicated that they would choose people whom they knew would not be judgemental and, when it came to their parents, they felt that this was more likely to be their mother.

The issue of judgment was rated as being an important factor by the students. They were particularly wary of people in positions of authority such as principals, teachers and counselling staff, as well as several of their older relatives. Depending on the nature of their information need they would often be reluctant to approach these individuals, even if this meant a reduction in the number of information sources they could access. They were wary of being put down; not wanting a lecture or telling off, not being typecast or losing face, and not wanting a big fuss or an issue made out of a relatively minor matter.

An example provided by a student was to do with a health related issue. *“I had a question that I didn’t want to ask the matron about as she would probably have had the wrong idea about why I was asking, so I asked a friend and we worked it out together”*. Another student mentioned how she had been embarrassed by the attention she had received from a school counsellor after having approached her for advice on a matter related to a family illness. This student stated that she knew the counsellor was just doing her job and was probably concerned for her well-being, but it had made life at school quite awkward when the counsellor tried to engage with her in the school grounds.

Information technology

Of particular interest was the discussion relating to the role of computers and the internet. Although all students interviewed used the internet at school, they were not impressed by the limited degree of access available to them. This limited access was due to the restrictions placed on searching. Although they were able to use internet search engines

such as Google and Yahoo, most sites of interest in their search results could not be accessed due to the heavily filtered internet service at school blocking access to 'suspect sites'. The filter allowed access to approved sites and the students identified these as educational and reference type sites (including New Zealand's on-line encyclopaedia, Te Ara, and the Dictionary of New Zealand Biography), curriculum resources (Te Kete Ipurangi), newspapers and media (Stuff, NZ Herald, TVNZ, TV3 and Māori Television), websites of libraries, museums and educational institutions, and the websites of government departments. These resources were deemed to be suitable sites to assist students to obtain information to meet their study commitments. The students expressed their frustration at not being able to access a wider range of web sites, with one commenting that she "*no longer wasted my time searching Google as most of the good results are not available*".

However, when I questioned them more closely about their internet access, it became obvious that although the access at school was less than satisfactory, in the majority of cases it was better than their access at home or other places where they accessed the internet. Fourteen students indicated that they did not have a computer and / or internet access at home, while six students did not have access to the internet other than through a dial-up system, which gave them very slow data connection speeds. This was consistent with the results of research undertaken in 2001 by AC Nielsen Media and reported by Parker (2003:458), which revealed that Māori homes had a very low uptake of computer and internet technology. Only 38 percent of Māori households possessed a computer (compared to the overall average of 49 percent for all New Zealand households). Statistics for use of the internet by Māori revealed that approximately 65 percent of Māori surveyed had not used the internet in 2000.

Those students who had restricted or unreliable access to the internet were quite vocal about what one labelled "*an injustice*". When I explored this further, this student explained that she felt like she was missing out

on essential skills which would help with her school work and future career prospects.

Another student who was a hostel student voiced her disappointment at the lack of access to social networking sites like Bebo and You Tube, and how she felt cut off from whānau and friends at home. Her views were backed up by other focus group members at her school, and similar sentiments were shared at focus group sessions at other schools.

Using libraries

Interestingly enough, one place where the internet is more freely available (albeit at a small charge) is the public library. However, from the discussions in the focus groups it was obvious that the usage of libraries was very low, and at two out of the six focus groups none of the participants had ever used a public library. There was a variety of reasons given for this non-use, and these were quite similar to the results from the Auckland City Library and Manukau Libraries surveys of their Māori clients.

When the participants were asked how many of them were regular users of public library services the response was quite low, with only six indicating that they were in this category. Another dozen students indicated they were occasional users, with most of those in this category stating that they had used a public library at least once in the previous six months.

As can be expected, the participants' use of the school library was more frequent, due to its proximity and the fact that they were timetabled to visit the library on a regular basis. At one school, participants indicated that they used the school library on a regular basis to do their homework. Participants at all four schools stated that they could not always get what

they wanted from their library, either due to the library not owning the resources they needed or because someone else was using it.

Students at one school believed that the person in charge of the school library did not have a very good understanding of their needs and could not help them find information they required for their work. The librarians at the other three schools were not thought of in the same way; however the focus group participants at these schools indicated that they were reluctant to ask for assistance. When asked why, the most popular response was related to not wanting to be teased by others, which seems to indicate a desire for self-preservation and retention of their mana (status). Other responses were centred on what could be described as information literacy issues, such as not being able to identify what information was required and not knowing how to phrase their questions properly. A number of the participants also felt that their school librarian was not always that easy to approach and so they were wary of asking for assistance. One group got around this by not asking alone and by approaching the librarian either as a pair or as a threesome, with one of them asking on behalf of them all.

Reasons for not using libraries

The general consensus emerging from the discussions was that it was not cool to be seen using the public library and being seen at the library was therefore embarrassing. *“It’s embarrassing to go there because if your friends see you, you tell them you’re using the internet”*. A minority of participants in four of the six focus groups mentioned that the library was not always open when they needed to use it or that the library did not always have the resources they wanted to use. Just under a quarter (11) of the students perceived the library as being highly focused on books, and they did not want to use these as the internet would often provide a quicker answer for their information needs. A total of seven students from three different focus groups (at two of the four schools) admitted that they had stopped using libraries because they had not

always felt welcome and they had been told off by library staff for being too noisy. One student said *“I’ve been told off so many times by the library staff over the last couple of years, that I don’t hang around anymore”*. Another student commented that he stopped going to the library because *“I don’t like being told to be quiet all the time”*.

Several students in the focus groups mentioned that neither they nor their whānau had ever been library users and did not have library membership cards. When I asked why this was, the main response seemed to be that their parents did not see the point of going to the library, with many of them being non-readers, others having experienced poor service or having been overwhelmed by the way libraries were organised. This, in a sense, may have created a whānau-oriented barrier, as the students might have been copying their parents’ behaviour. Another theme that emerged was the negative image that libraries have amongst Māori. This was partly to do with the perceptions that it was more European than Māori in its focus and the fact that the library, in some of their parents’ eyes, was a place where they had been sent to be punished when they had been at school (albeit the school rather than the public library).

When I asked the students whether they felt they were disadvantaged or missing out on something by not using the public library, the consensus seemed to be that they thought that they were not. Several of the students indicated that they *“didn’t need the library”*, while another said that it was *“hard to miss something that just wasn’t relevant”*. When asked what would get them to use or go to the public library, a number shrugged their shoulders in a ‘don’t know’ fashion. A couple of students in one group were more willing to engage and said that they might go if they could see something of value to them, including youth focused events such as concerts, the possibility of winning or getting free stuff, or if there was a separate place for them to hang out away from adults.

Students who did admit to being library users stated that it was more likely to be for a specific purpose, such as looking for a known item or for using the internet. One participant stated that he used his local library on a regular basis, particularly as it had the cheapest internet access rate in the area. The main reason for these students using the library, however, seemed to be related to the fact that either their parents or their whānau were library users and they had always gone with them to the library from a very young age, and this meant that they (the students) had formed the habit of using the library.

Māori information seeking barriers

When seeking information in a Māori cultural context, more than half of the participants agreed that the best sources of information would be someone close to them, within either their whānau or hapu unit. However it was made clear by just over a third of the participants that Māori information was not always readily available to them from those sources. In some cases this was because their family did not have a strong cultural identity, and the knowledge of whakapapa and tikanga was not strong amongst family elders. This was best summed up by one student who explained that this information had been lost because *“our Māori side is from my nana’s family and she never really spoke about our links, so my mother doesn’t really know anything about our whakapapa”*.

About a quarter of the focus group participants admitted that they were not always confident about approaching people (especially elders) for Māori focused information, mainly because they did not want to appear to be ignorant (particularly of tikanga), or because they did not always know what the question / problem was that they needed to clarify. A specific example of this happening was provided by one of the students who wanted to know *“why some visitors only received a mihi whakatau [informal welcome] and not a powhiri”*.

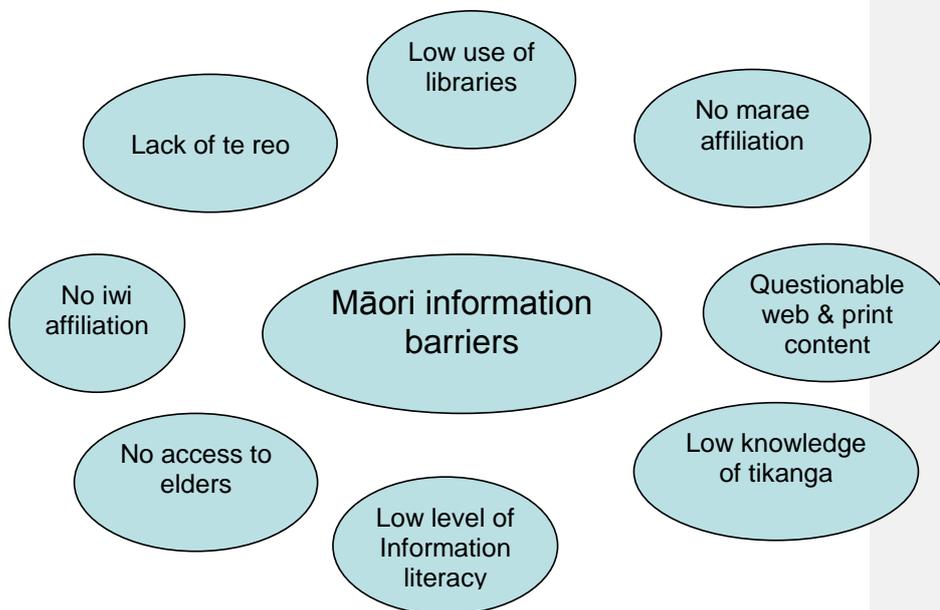


Diagram 6: Māori information barriers

A number of students in all of the focus groups noted that their lack of ready access to elders stopped them getting information directly from ‘traditional’ sources. The reasons for this lack of access included not knowing any elders (on a personal level) or the elders not always having the knowledge; others also indicated that the reason for not being able to talk to elders was because they lived hundreds of miles away from them. This is a common reason applying to those who are part of the urban drift, or who had lost touch with their hapu (sub-tribe) or iwi (tribe).

Language barriers were identified as another issue. This was particularly so for those who were not fluent in te reo Māori, which some elders prefer to use when discussing issues such as whakapapa and tikanga Māori. *“My koro [grandfather] says that Māori isn’t always the same when translated into English, so he’ll try and explain quite detailed things in Māori and I can’t always follow what he’s saying”*. Another student described his embarrassment at not being able to understand what he was being told and how he had not wanted to admit his lack of

knowledge or language ability, as he did not want to get a lecture about his faults.

Another theme emerging from the focus groups was the fact that a substantial number of students did not visit a marae on a regular basis, so they did not have easy access to social networks operating in marae settings. The reasons for not visiting marae were numerous, including whānau / hapu disputes, no connection with any marae close by, not knowing enough about Māori connections and no marae to visit. The last two reasons are likely to be quite common; the 2006 Census results revealed that 102,366 Māori did not know what iwi they had affiliations to, and it can be assumed that many of these individuals would find themselves in the same predicament as the students in these focus groups. Further research with individuals in this category should be conducted in the future.

Over two thirds (33) of the focus group participants stated that they had sought information about Māori issues on the internet. Just over half of these participants stated that the information they had obtained from some of these internet sources had not always been helpful. In some of these cases they found the information that they retrieved was too general and not always credible: *“one problem is that quite often you don’t know who is writing this stuff, they might not even be Māori”*.

The same issue was identified as being a problem with printed sources, where *“three different books have three different ways of describing the same historical event with no way of knowing which one is right”*. One issue identified by a participant in relation to the generality of some websites and printed sources was that the authors did not always stipulate what tribal area the information on aspects of tikanga applied to. *“Some of the early writers on Māori things wrote down things they saw and they weren’t always right about everything they saw and sometimes they got it mixed up or just thought it was the same in other areas”*. One problem that these issues raise is that these barriers may be partially

caused by the participants' lack of ability to evaluate information, which is one of the critical skills that information literate individuals possess.

One way the information can be evaluated is by attempting to verify it with someone who has knowledge in the area of interest. The participants indicated that, wherever possible, they would attempt to verify the information they had obtained from the internet or printed sources with someone they thought would have the knowledge, such as a family member, one of the Māori teachers at school or a friend. However these people did not always have the Māori knowledge to judge the authenticity of the information either.

The relevance of Māori identity

The analysis of the data from the questionnaire results, indicated that those students who said that they have a strong sense of their Māori identity⁴⁵ also claimed they experienced few information barriers when it came to asking other people for information. This was not evident for those who did not have the same level of cultural confidence. The difference was quantified by the fact that those in the latter category chose a higher number of barriers from the list of ten potential barriers, with 95 percent of them indicating they had difficulties in asking other people for information, as opposed to 20 percent of those in the high cultural identity category. In the focus group discussions, those with strengths in these areas stressed that they felt less intimidated in modern and traditional information environments, happily switching from one cultural world to another when faced with the prospect of seeking information. They would select the appropriate source to use on the grounds of general availability at the time of need, and if they deemed it necessary they would check with an alternative source at a later time. This was illustrated by one student who told of his need for a particular

⁴⁵ (i.e. can speak and understand te reo Māori, know their whakapapa and visit marae on a regular basis)

story about his iwi. *“If I was at home, I would go see my uncle who is the kaumatua for the hapu and ask him for the information, but instead I had to check out some books and the internet, the only problem was that there were three different versions so I had to get my mum to go see him and find out from him which is the real one.”*

Those without strong Māori identity indicators (found mainly at the co-educational schools) were not necessarily cut off entirely from the Māori information world, but they did indicate that their options were limited as they were not part of a marae community. They were more likely to seek this type of information from those who were close to them, including parents, siblings, whānau, friends and teachers. However, as stated earlier, the individuals they approached could be quite limited in their own knowledge. I also asked those individuals within the focus groups who indicated they were in this category whether they felt as restricted when seeking information in a non-Māori world. The response was not definitive, with several indicating that they were much better at accessing information in this context; others were non-committal and a handful of students admitted they had problems retrieving information regardless of the context. Those in the latter two categories were more likely to have information literacy issues and / or confidence issues when it comes to searching for information.

It is possible that many of these students could be disadvantaged by an expectation that having dual world views would allow them to switch from one cultural context to the other, as identified in the cultural interface discussion in Chapter Three. Nakata (2002:285) identifies the interface as being a cause of confusion due to its “complex interwoven, competing and conflicting discourses that distinguish traditional thoughts and practices from the non-traditional in the day to day.” However it can be questioned whether those who do not have Māori cultural competencies can be adversely affected by the interface, as they technically should only have access to western forms of knowledge.

Discussion

The data collected and analysed for this chapter demonstrated that Māori students faced a variety of barriers in finding the information they sought in order to actively participate in everyday life. The impact of these barriers was more noticeable when attempting to find information in a Māori context, especially for those participants who did not have the necessary cultural and language abilities required to be active and successful information seekers in the Māori world.

The preference for interpersonal sources was consistent with the results from other information seeking studies involving youth and ethnic minorities (Hsia (1987); Fisher et. al. (2004); Agosto and Hughes-Hassell (2006)).

Although other people were a preferred source, it was obvious from the survey and the discussions that there were substantive barriers associated with their use. It was clear that trust and respect played an enormous role in who was approached, even when it was for information that might not be within the scope of that individual's knowledge or experience. In the results from the questionnaire, although the lowest number of responses was received for the statement '*I don't like asking questions*', it was apparent from the discussions in the focus groups that this was more to do with the information seeker preferring not to ask people they did not know or trust. This in itself could lead to major problems as those they knew and trusted might not have had the requisite knowledge or skills required to be able to provide the information required.

Significant barriers

As the questionnaire did not ask the students to rank the barriers in terms of the most to the least significant, I made a concerted effort to

extract this information through the focus group questions. In analysing the discussion it is again necessary to consider the cultural factors associated with this. As not all focus group participants were fluent in te reo Māori or did not consider themselves as competent in their knowledge of tikanga Māori, they considered these to be significant barriers to obtaining Māori information. Of the 45 participants, 26 considered this to be a significant barrier for them, which often meant that they did not receive the information they required.

When pressed about whether their information seeking strategies differed depending on the cultural context they required the information in, it became clear that in Māori cultural contexts, participants' choice of individuals to ask were normally elders and parents, followed by friends. The success or otherwise of their information seeking was therefore highly dependent on the knowledge levels of the individuals they were asking. If they failed to get satisfactory answers from those sources, they would then resort to either printed and / or internet sources.

Internet access was a major issue for the students. Those who used the internet on a regular basis at school voiced their frustrations at the limits placed on them by the school internet policy, which resulted in their retrieved results being filtered. This was even more frustrating for those students who did not have reliable access or internet facilities at their home. Although some of these frustrations may have been solved by using public facilities at places such as public libraries or internet cafes it is true to say that the associated costs of doing so would be another barrier. The cost of using the internet at public libraries is, in many cities, being phased out through the introduction of the Aotearoa People's Network Kaharoa (APNK), which is placing computer hardware, software and internet access into libraries free of charge. Although the cost may no longer be a factor, issues regarding the perceived stigma or the reluctance many Māori students have when it comes to engaging with public libraries remain. This is an issue that provides a major hurdle for the library profession and public libraries to overcome.

Another significant barrier identified was the fact that many of the students did not know where to find the information they need. Upon further exploration of this issue, it emerged that this was partly attributable to their clear lack of information literacy skills. They appeared to experience problems in identifying the information required, crafting a search strategy to locate it and then choosing the right source of information to search. This was particularly the case when using print or electronic resources. As mentioned earlier, their lack of satisfaction with the internet was partially to blame, however if they had made stronger use of public library facilities it is entirely possible that these skills may have been enhanced through exposure to librarians as well as using sources from the 'deep web' such as article databases.

As mentioned earlier, there was a distinct preference for using interpersonal sources to obtain information. The results from the survey and focus groups indicated that there was an emphasis on asking individuals who were not only close to them but were people that they trusted. However the results also revealed that the interpersonal sources chosen were perhaps not always the wisest choice. This was mainly due to the fact that they did not always have the correct information and / or they did not know where to get it from. If the individual asking did not approach a wider circle of contacts, either through a social network or their wider whānau, then their information quest would remain unfulfilled.

Gatekeepers and information carriers

The three chapters on the networking and information exchange activities in schools, social and cultural settings have already demonstrated that there are key individuals involved in the activities and information flow within and between other groups. These individuals have many of the characteristics of a 'gatekeeper' in terms of deciding what information makes the transition from one social network to the

next. Instead of being referred to as gatekeepers they are perhaps better described as information carriers, as they distributed information from one network to the next. Although they might not pass on all the information they had gathered, the role of a gatekeeper might not be intentional. It must also be remembered that although this behaviour is described as gate-keeping, to the person passing the information on it was in fact only passing on information that they remembered, that they thought was relevant, that interested them or that they thought might interest the rest of their network. The fact that there might be information they were party to that they did not pass on does not necessarily mean that they were intentionally withholding it; it was more likely that they had dismissed it as being irrelevant to them or their friends.

The information that is passed on, however, does take on a life of its own and once it has been shared it can no longer be controlled. This meant that, in some social group situations, information was only shared with those whocould be trusted not to pass it on. This type of information was typically quite personal in nature and could be embarrassing to the individual concerned if it was made more public.

The ability for a gatekeeper to stop information spreading outside of school is inhibited by the fact that Māori students have wide social networks. Māori students not only mixed with other Māori students at their schools, but also participated in wider social networks which resulted in the exchange of information between schools, genders, ethnic groups and age ranges. Essentially, once information entered the public domain it became fair game and, if it was assessed as noteworthy, it would be passed on from individual to individual and network to network.

Areas for future research on Māori information barriers

This research has focused on students in four schools based in the lower region of the North Island. Although two of the schools are predominantly Māori in nature, the preferred language of instruction is

English. New Zealand currently has 68 kura kaupapa Māori (Māori immersion schools) with approximately 6,000 students enrolled; as these schools are using Māori as their primary language of instruction and tikanga Māori is strongly integrated into their curriculum, a similar research project with senior students from these schools would be of interest in terms of whether they experience the same barriers accessing everyday information sources and fewer barriers accessing Māori information sources.

Conclusion

This chapter has provided three key findings related to the barriers encountered by Māori secondary school students in the process of seeking information. The first key finding is that those students who have a high sense of their own cultural identity possess the confidence to engage with other people regardless of which cultural context they find themselves in. The evidence also suggests that those without the cultural confidence struggle when seeking information from others.

The second key finding is that major frustrations exist with regard to the restrictions that Māori students experience in trying to use information technology. These restrictions are partially due to no or unsatisfactory access to the internet at home and the filters that schools place on their local area networks that stop students from accessing information beyond approved web sites. For those without access at home, an unwillingness to use libraries and the resources available there in print and electronic forms means that they are disadvantaging themselves even further.

The third major finding is that the social networks that Māori students are part of rely heavily on the contacts of key individuals, points toward the development of a community that is occasionally dependent on 'gatekeepers' for the introduction of new information. These gatekeepers

also act as information carriers who have strong relationships with other groups. The information they share and exchange through these relationships is highly valued and is normally traded on a reciprocal basis. Though their trading, these individuals not only enhance the knowledge of their groups but also have the potential to increase the mana of the group by delivering valuable information to other groups.

This chapter has focused on the barriers that Māori students encounter in the information seeking, sharing and exchange interactions, and builds on Chapters Five to Seven which described the role that social networks play in these processes. The next chapter will present a model based on information behaviours and tikanga Māori that has been developed from an analysis of the data collected during the research process.

Chapter Nine

A values based Māori information exchange model

Introduction

Chapters Five to Eight have focused on presenting the analysed results from the data collected for this research project. Each of these chapters has identified key behaviours exercised by the students in the process of seeking, sharing and exchanging information. The purpose of Chapter Nine is to bring those behaviours together, to form a model that represents how they are manifested as values in a tikanga Maori (Māori culture) framework. In the literature review in Chapter Three I indicated that models developed by Wilson (1983, 1999), Krikelas (1982), Ellis (1994), Dervin (1992) and Kuhlthau (1991) are unable to represent the information seeking behaviours of Māori secondary school students as these theorists worked within a westernised academic framework and did not appear to have not considered indigenous peoples' experiences when the models were constructed. As a result these models are also thought to be strongly associated with processes and, although they consider the role of emotions, they fail to take into account the role that values play in information seeking behaviour. In contrast, the Māori focused literature discussed in this chapter, and the analysed data collected from the questionnaire and focus groups, demonstrates that there is a clear need for a model to represent Māori information seeking, sharing and exchange behaviours. Such a model must include the values that constitute tikanga Māori.

The role of values

The *Oxford English Dictionary* (1989) defines values as “the principles or standards of a person or society, the personal or societal judgement of

what is valuable and important in life". In western ideology these values are typically expressed in legal, religious and social contexts, with an emphasis on morals and distinguishing between right and wrong.

In an indigenous framework, values are typically related to the worldview, with Marsden (2003:56) stating that this "worldview is the central systematisation of conceptions of reality to which members of its culture assent and from which stems their value system". In an indigenous worldview, these values have been determined by the close bond between indigenous people and the natural world which has whakapapa (genealogy) as its foundation. Marsden (2003:38) maintains that within te reo Māori (Māori language) there is no word that equates with value. He considers that taonga (treasure) is the closest in that it represents an "object of good or value" that can be considered to "be tangible, intangible, material or spiritual". Marsden continues by equating the taonga with "cultural tradition, lore, history, corpus of knowledge, with which the descendants can identify and which provide them with their identity, self-esteem and dignity; that which provides them with psychological security".

Anthropologist Joan Metge (1995:79-105) refers to whānau (extended family) values as 'whakaaro nui' (collective wisdom), with these values providing a framework of behaviour for whānau members to use when interacting with each other and outsiders. In her description of values she divides them into positive and negative groupings. She lists the positive values as aroha (respect), whanaungatanga (relationships), taha wairua (spiritual dimension) and taha tinana (physical dimension), ora (health), tika (correctness), mana (status), mahi a ngākau (work from the heart), utu (reciprocity) and kotahitanga (unity / togetherness). Negative values include kaiapa (selfishness), whakahihi (vanity), wene (jealousy), whakamaui (holding grudges) and māngere (laziness). Metge indicates a desire to adhere to positive values and avoid negative ones is motivated by wanting to be accepted by others, not wanting to be the subject of

gossip or to be rebuked and to lose the support of other individuals and whānau groupings.

White (2000), Durie (1994, 2005) and Hook (2007) use values as the basis of models that involve runanga operations, Māori mental health, research potential models and Māori mentoring.

White (2000:42) outlines the set of core values adopted by Te Rūnanga o Ngai Tahu to underpin their operations. These values include tino rakatirataka⁴⁶ (self determination), whanaukataka (family), manaakitaka (looking after our people), tohukataka (expertise), kaitiakitaka (stewardship) and kōkiri / manutioriori (warriorship). At the time of writing his article, White noted that the value of utu (reciprocity) was still evolving. From these values, the Runanga (tribal council) created operating principles to guide tribal staff who deliver tribal outputs. These principles include participation, reciprocity, collectivity, complementarity, accountability and wellbeing.

Durie (1994: 68-73) uses a four sided construct to describe a view of contemporary approaches to Māori health. Unlike the other models discussed in this chapter, Durie's *Whare Tapa Wha* model does not specifically incorporate values such as wairuatanga (spirituality), but uses four different dimensions which he likens to the walls of a house. These dimensions include taha wairua (spiritual side), taha hinengaro (thoughts and feelings), taha tinana (physical side) and taha whānau (family).

The taha wairua dimension involves the ability for humans to have faith and to be able to make the link between humanity and the environment. The taha hinengaro dimension involves the expression of thoughts and feelings so that they become integrated with each other, with the result that spoken and non-verbal expressions of emotions both contribute to

⁴⁶ Ngai Tahu dialect sees the ng consonant in te reo replaced by a k thereby making rangatiratanga into rakatirataka

healthy communication between individuals. The taha tinana dimension focuses on physical health, with Durie emphasising the separation of tapu (sacred) and noa (profane/normal) elements. Certain parts of the body such as the head are considered to be highly tapu, while food is seen as a means of removing any of the sacredness. The separation of the functions of bodily cleaning from eating are seen as necessary to maintaining good health. The final dimension, taha whānau recognises the cultural and emotional contribution made by the family, in addition to the physical care and nurturing that is expected. Another expectation is that of inter-dependence; that individuals will turn to whānau in good times and bad. The fundamental theme of the *Whare Tapa Wha* model is integration, with individual health being part of the wider system. Personal identity and family identity are closely linked and the boundary between them is unclear, as is the relationship between temporal and spiritual, thoughts and feelings, and mental and physical factors.

Durie (2005: 156-57) presents what he labels a research potential model relating to genetic modification. The Rangahau Painga model uses key Māori concepts based around domains, values and research outcomes. These domains are mana whenua (natural environment), mana tangata (human condition) and mana whakahaere (procedural certainty).

Under the mana whenua domain, Durie places mauri (integrity), whanaungatanga (relationships) and kaitiakitanga (guardianship). Under mana tangata are the values of wairua (spirituality), tapu (safety), hau (vitality) and whakapapa (inter-generational transfers). The mana whakahaere domain contains the tikanga (protocols) value. Each of the values identified can then be tied to research outcomes; for example the whanaungatanga value has a research outcome which strengthens relationships between people, between people and the natural environment, and between organisms.

Hook (2007:6-8) focuses on the values found in formal Māori mentoring situations, with Hook labelling this awhinatanga. In the Māori mentoring

context, he notes that the outcome of the mentoring relationship is not only focused on the good of the individual but the wider collective. Hook identifies four elements within the workplace that require careful consideration, these being pumanawa (ability), wairua (spirit), hinengaro (mind), and tinana (body). Within the awhinatanga framework, Hook lists 11 principles that contribute to the mentoring process: whakapapa, whanaungatanga, te reo, tautokotanga (support), manaakitanga (hospitality), rangatiratanga (self-determination), mahakitanga (humility), utu, kotahitanga, wairuatanga and kaitiakitanga. These principles need to be delivered in accordance with tikanga Māori. Hook (2007:9-10) pinpoints the major difference between Pākeha and Māori mentoring approaches as being spirituality, with Pākeha mentoring being void of it while the awhinatanga model is embedded in spirituality, with every principle of the model being an expression of wairua.

In conclusion, the models presented in this section demonstrate the important role that values play in different aspects of Māori society. Although each model has a different interpretation of how the values manifest themselves, this does not detract from their effectiveness, with this effectiveness being largely determined by the context in which the values are being applied. The most important aspect of these values, however, is the tikanga (cultural values) that surrounds their application.

The role of tikanga Māori in a Māori information exchange model

The core of this and any values focused framework is tikanga Māori; these are the cultural practices and shared understandings that underpin the relationship between individuals, whānau, hapu and iwi. The relationship between tikanga Māori and information is explained by Mead (2003:7) who states that “all tikanga Māori are firmly embedded in mātauranga Māori” (Māori knowledge systems). He continues by explaining that “mātauranga Māori is carried in the mind and tikanga Māori puts knowledge into practice as well as adding aspects of correctness and ritual support”.

The values that make up the model are inter-related, but the ways in which they interact are not always the same as they can vary from situation to situation, within and between groups.

The discussions in the focus groups indicated that the participants would draw on these values in contexts that fell outside the interactions that they typically were part of with their normal contacts and whānau members. One drawback of this, however, was that there would not always be mutual understandings between themselves and those with whom they were interacting. This was mostly because the other party was not familiar with Māori values. If neither party to the encounter was able to adapt, change or reach a compromise, then a failed information transaction was a typical outcome. Although the values are inter-related they are not always inter-dependent, so not all have to be present in order for them to be an effective influence on the information behaviour of the participants at an information grounds situation.

Kaupapa principles

The key values identified are contextualised by tikanga Māori and are organised into three different kaupapa(principles): kaupapa whakakaha (principles of strength), kaupapa tuakiri (principles of identity) and kaupapa atawhai (principles of humanity) Each of the principles consists of five values, as illustrated in the following table.

Principles

Kaupapa Whakakaha Strength	Kaupapa Tuakiri Identity	Kaupapa Atawhai Humanity
Rangatiratanga Self-determination	Whakapapa Legitimacy	Tau-utuutu Reciprocity
Whakamana Status	Iwitanga Tribal Pride	Awhina Assistance
Pono Trust	Te Reo Language	Rēhia Enjoyment
Wairuatanga Spirituality	Whanaungātanga Relationships	Manaakitanga Respect
Whakamōwai Humility	Kotahitanga Unity	Tautoko Support

Table nine: Māori information seeking values based model

Although the values are in three columns, it must be stated that they are by no means a static force, as they interact with each other to emphasise the underlying importance of tikanga Māori in fulfilling successful transactions within the network and with other networks.

Kaupapa whakakaha

The first principle, kaupapa whakakaha, focuses on developing the robustness of the network. The values that make up this kaupapa emphasise the inner strength that each member has and the way they use this in interactions with each other to strengthen the collective. The qualities that each member possesses is not only important to their own development as an individual, but through their interaction with each

other they can complement and, where necessary, mentor each other. Ideally, through their relationships they can ultimately make the group stronger. The five values that make up this kaupapa are rangatiratanga, whakamana (status), pono (trust), wairuatanga, kotahitanga and whakamōwai (humility).

Rangatiratanga

The rangatiratanga principle involves the process of empowering individuals to take action or to act independently, and in a sense this can also be viewed as an act of leadership. In the process of empowering the individual, it is recognised that individuals will have different strengths and that these should be used to their full potential. From an information seeking and exchange perspective, this might involve empowering a member with advanced communication skills to act as the go-between with other social networks, organisations or individuals, in order to receive and exchange information. An example of this can be found in networking in the social context, where an individual who had a link to another social group that was gathered within the same precinct would be empowered to go and engage with this group to elicit specific information, for instance information relating to whether they knew of any party venues for that weekend, or the name of a particular member of their network whom a member of their own network wanted to know.

Alternatively, the group itself could exert its collective rangatiratanga and decide not to exchange information with other groups. Although this would be an information barrier for the other group, it would allow the group to exert its rights to maintain the integrity of the information being shared within their network. This was demonstrated in the school networking situation, where members of a network decided to exclude others from their exchanges as they did not want the information they were sharing to be spread more widely.

Whakamana

Whakamana is a value that recognises that a network and its members have status, with the degree of status held depending on the actions, achievements and successes of the network or the people in it.

The status of network members will often be different as it must be recognised that individuals have different qualities and strengths, with an expectation that they will use these for the greater good of the group. An example of this can be found in the networks formed in the casual zone at school, within a network developed in the sporting context which included a provincial representative player whose prowess on the field often made the difference in the team's (network's) overall success. Other individuals within the social network will have increased mana due to their leadership qualities; an example of this was found at three out of the four schools where networks included school prefects and the head pupil. These networks were not only held in high regard by those within them, but also by other networks within the school and the teaching staff.

The mana associated with a network can be due to its affiliation with an organisation that is held in high regard, including a school, marae, or a sporting organisation.

Whakamana also recognises the status of other social networks, by acknowledging the credentials of the members or the contribution the network may play in the creation, dissemination or exchange of information. Social networks will at times have mana due to the fact that other networks hold them in high regard. In a teenage environment this could be attributed due to their perceived 'coolness'. An example of this being a group of girls at one school who were held in awe by others for their fashion and dress sense.

In an information seeking context, mana is particularly relevant to network members who may be expert at acquiring or processing

information that empowers the whole network. These members make a substantial contribution to the exchanges that may be entered into with other individuals or networks, thus lifting the status of the entire network. This in essence could be about sharing triumphs and celebrating successes.

Pono

Pono, or the value of trust, is an essential element of the relationships developed within a network and is closely associated to respect and support. Trust of others in the network will ensure that information shared will be valued and where necessary kept secret, particularly if it is personal information that members do not want shared outside the network. The application of this trust value was quite evident at the girls' school where the respondents' emphasised the need to keep information about their personal health and relationship issues contained within their network, and not to share it with other networks or with school authorities. It was indicated that any failure to fulfil these relationships of trust would result in the individual being excluded from the network.

Although trust can be developed with those outside the network, there is a reluctance to do so at times. This is because the power relationships with individuals such as teachers, principals, counsellors and librarians are harder to control, and individuals interacting with these authority figures cannot always stop them from sharing information with others or storing it away for later use. This value is closely related to the manaakitanga value, as respect is an essential part of the value of trust. Without respect, trust is limited in nature.

Wairuatanga

Wairuatanga relates to spiritual values and includes knowledge and information about the right way of doing things from a tikanga Māori

perspective. Although all individuals have a wairua, not all are as well versed in tikanga and associated spiritual values.

Those with the skills and knowledge in this area are acknowledged by fellow network members and undertake a leadership role in ensuring others know the way to behave or the correct action to take, such as reciting karakia (prayers) or the correct protocol around food. Focus group participants identified these individuals as protectors of the spiritual integrity of the network, who have the wherewithal to know when to ask individuals with a deeper understanding of tikanga. The need for this type of knowledge was most evident in the discussions relating to the social networking activities undertaken in a cultural setting. As the activities within this precinct often involved switching from tapu to noa states, focus group participants indicated that this guidance is vital in ensuring that all members of the network are kept culturally safe. Exposure to this guidance can also flow on to the networking relationships in the social and school contexts, with those who have been privy to this information in the cultural context being able to share it with those in the other networks they are part of. This may include information about how to act and to keep oneself and other network members safe by ensuring that any behaviours are compliant with correct protocol, particularly when talking about or participating in events such as tangihanga.

Whakamōwai

The final concept involved in the model is that of whakamōwai, which is about humility. This recognises that although an individual's contribution to the information network is highly valued by the other members, it is not considered to be acceptable to boast about one's own value to others. Such behaviour is seen as promoting oneself at the expense of other network members, and in some senses diminishing the value of the mana held by others while inflating one's own. This is represented in the

discussions that were held about exchanging information within a school network, which saw more academically able students assist other members of their group with their homework. The academic strengths of network members were recognised by their peers and used for the good of the network. In providing this assistance, individuals were expected to be humble about their abilities and not to skite about their superior knowledge.

The talents and virtues of group members should be recognised and utilised by the group for the benefit of the group. Humility is a concept that can also be applied to the whole group, because although the group can have a sense of confidence about itself and its members, the recognition of the overall qualities of the group should come from others and not the group itself. This humbleness is represented by the whakatauki (proverb) 'E kore te kumara e korero mo tona ake reka' (the sweet potato should not boast about how sweet it is).

Kaupapa tuakiri

The second principle, kaupapa tuakiri focuses on the values associated with Māori identity. This principle highlights the fulfilment network members receive from being Māori and how this reinforces the cohesiveness of the network. This principle is complemented by the values discussed in the other two principles, notably as strength of identity is a major contribution to how strong an individual feels as a person and how this affects the collective. Similarly, Māori identity assists in knowing and behaving correctly towards each other in accord with tikanga. The values that are included in this principle are: whakapapa (legitimacy), iwitanga (tribal pride), te reo, whanaungātanga (relationship building), and kotahitanga.

Whakapapa

Whakapapa as a value relates to legitimacy, as it is through whakapapa links that one establishes one's identity as Māori. An example of the use of whakapapa in an information exchange environment is in the korero (speeches) of the powhiri (welcome ceremony), where kaikorero (orators) contextualise themselves by reciting their whakapapa. This not only legitimises their mana, but provides all those gathered with information about their line of descent and legitimises them as a member of the hapu and iwi they belong to. Although whakapapa is perhaps the most important factor in defining Māori identity, it is still possible to be identified as Māori without that knowledge. For members of the group who are Māori but do not know their own whakapapa, legitimacy can be proven through the sharing of the other values that the group subscribes to or through their own behaviour.

For social networks that are based on kinship like whakapapa whānau, the whakapapa is the legitimate key to membership, with all members being able to show their relationship to each other based on descent lines.

Unfortunately not all whānau have a strong sense of whakapapa due to alienation from their hapu and iwi. This situation may limit the legitimacy of the whānau or individuals in it when participating in Māori focused situations. In urban areas, in a sense this situation has been curtailed by the formation of urban Māori authorities, which act as iwi for those who have lost their links and thus provide new means of legitimising identity for those who require it.

Iwitanga

Iwitanga is as much to do with identity as it is to do with tribal pride. Those that are from the same iwi have issues in common with each other, and will share or gather information on whakapapa, whānau

relationships, hapu matters and marae affiliations. An example of this is information that was shared about tribal and trust-based scholarships available to legitimate descendants.

There is also the inter-iwi rivalry that manifests itself and can result in a situation where information or stories about tribal achievements and past successes is traded in a 'tit for tat' situation bordering on one-upmanship, with the members of an iwi expected to do their utmost to uphold their iwi's reputation. Examples typically include inter-tribal battles, sporting feats, political representation or academic achievements of iwi members. The ammunition for these types of exchanges can be gathered at marae and whānau based gatherings, where stories of past deeds are shared by kaumatua (male elder), kuia (female elder) and other whānau members.

It is important to recognise that this is a difficult value to share for those who do not know their iwi. In these situations, the concept of iwitanga thus becomes more about the pride of the network or another Māori network which they feel a part of.

Te reo

Te reo is all about pride and proficiency in te reo Māori. Along with knowledge of whakapapa and tikanga Māori, te reo Māori is another of the core ingredients of Māori identity. For the students that have high levels of proficiency it is a core language of communication, especially in cultural situations at marae and other cultural gatherings. A prime example of this is found in the school environment when these students take a leadership role in cultural situations such as powhiri, where they perform in the role of either kaikorero (orator) or kaikaranga (caller).

Not all network members are able to understand or converse in te reo Māori, so for those who can it is a point of difference. These individuals are able to not only participate and learn from the rituals of the marae,

but engage in discussions with elders and other learned individuals. In carrying out these discussions they are able to obtain information that they can then share or exchange with fellow network members or those in other networks.

Whanaungātanga

Whanaungātanga involves the act of building relationships between individuals. Although the word is an extension of whānau, it does not always mean that the people who are developing relationships are related. As noted by Metge (1995) and Mead (2003), whānau can also be kaupapa (issues) based. The purpose of building relationships in these types of situations is to identify shared interests or people they have in common. By establishing these links, it may be possible to identify opportunities for collaboration or co-operation, either now or in the future. The interactions that take place at the waharoa (gateway) and the car park of a marae between manuhiri (visitors) are examples of whanaungātanga in action, as those who have gathered seek to establish links between themselves and their respective groups, and any links they may have with the tangata whenua (hosts) of the marae so that these can be acknowledged in the karanga (welcome call) and the whaikorero (speeches) that follows.

In a non-Māori context, whanaungātanga can be viewed the same way as the act of networking and building social relationships. In an information seeking and exchange scenario, the concept of whakawhanaungātanga is about building the networks so that information can be attained, shared or swapped. The relationship between different social networks will be sustained through the use of the skills associated with whakawhanaungātanga. The process of building these relationships is continuous as network members meet and interact with new contacts.

Whanaungātanga is not restricted just to relationships within a group but can also be applied to the connections between groups. The building of these relationships is an essential part of the sharing and exchanging of information. Without these relationships, it would sometimes be difficult to confirm or further clarify rumours or information that affects the group.

Kotahitanga

The concept of kotahitanga revolves around the notion of unity and all group members making a contribution for the good of the group. This is an important aspect of strengthening and maintaining the integrity of the network, with the concept also encompassing the need for loyalty to the group and to each other. In an information exchange and sharing environment this would involve the network working together to gather information and / or all members taking responsibility for preventing information affecting the group or members of the group from being shared outside the network. For example, in the focus group discussions around the issue of smokers' hangouts at school, it was stressed that there was an expectation that those that gathered in these places would not reveal to anyone in authority (teacher, principal, prefects) if they were caught smoking and would take 'one' (punishment) for the group as a whole.

Kaupapa atawhai

The third principle, kaupapa atawhai deals with the values associated with humanity, in the sense of how social network members relate to each other and to other social networks. As mentioned in the description of the previous principle, each of the principles is dependent on the values of the other two. In the case of this principle there is a need for the individuals and groups they belong to being collectively strong and having a strong sense of their identity, as this will help mould how they behave. The five values included in this principle are tau-utuutu

(reciprocity), awhina (assistance), rēhia (enjoyment), manaakitanga (respect) and tautoko (support).

Tau-utuutu

Tau-utuutu implies reciprocity between the members of a social network or between networks. This concept includes the expectation that information will not only be shared or given, but that the communication of information from one person or where applicable a network will see information returned in kind. It is highly desirable but not always possible that the information that is exchanged should be of a similar value. If it is one network exchanging with another, the value of the information is important to the relationship between them. An example of a reciprocal relationship can be found in the interactions that occurred between different year groups at the girls' school, where it was stated that it was not normal for the groups to communicate with each other. However this was occasionally put to one side when members from each year group (quite often siblings) would interact and trade information that would then be shared with their respective networks.

The failure to receive information of sufficient importance will lead to a diminished status being attributed to the relationship by the network receiving information that it considers to be of lower or lesser value. Although the network ties will not be severed they might just be called on less often, thus leading to a greater loss for the network that was receiving more or better information than they were giving.

The reciprocity between members of a network will not always be equal in terms of the amount and / or quality of the information, but it is expected that all will contribute to the information that is exchanged. Like all networks, the members will have different strengths, so it is possible that one member may contribute more in the form of information and instead get back assistance with another aspect of life or learning.

This could be in the form of learning about different aspects of te reo or tikanga Māori, or assistance with homework or personal issues

Awhina

The concept of awhina relates to the assistance that network members give to each other. This assistance can be through advising fellow network members about ways to access information, or how to evaluate or process information. Like the values of tau-utuutu and manaakitanga, this value implies that those with strengths in one area will make them available to other network members and will in turn receive assistance in areas they require it. In the focus group discussions at one school, this value was represented by the assistance that was provided in the computer laboratories by those who were more skilled at using the technology than other social network members. Another example was provided at another school where it was noted that there were some members of the social group that were better at accessing and retrieving information when they were using the school library, and that they would assist others when required.

Rēhia

The value of rēhia is about enjoyment and recognises the fact that participation within the network is just as much about recreation and fun as it is about serious issues.

This enjoyment could be in the form of socialising with friends, reminiscing about past activities or about individuals known to each other. The enjoyment can also be represented through the sharing of information about common interests such as movies, gossip or personal issues, or playful teasing of fellow network members. The gathering of social groups at shopping malls and foodcourts is an example of how this value is fulfilled. The focus group discussions identified these gatherings as being quite relaxed affairs, with the prime purpose being to just hang

out and have fun away from the expectations that teachers, parents and whānau have of them.

Manaakitanga

Manaakitanga has a number of possible definitions; the definition used in this model is respect, but it can also be described as kindness, hospitality or support provided by one person to another. In the context of this model, manaakitanga manifests itself in the form of the nature of the relationships between individual group members and / or between groups.

Respect in this context can relate to the value that the group gives to the information that each member brings to the network. Manaakitanga can also relate to the strengths of each individual being acknowledged and recognised by other group members. In one focus group it was noted that there was an individual in their network who was closely connected to another network (sports-based), and as such was able to share information gathered from that network with their school network. As the sports related network was made up of players from other schools, the quality of the information was seen as extremely valuable.

In terms of respect between groups, this respect needs to be earned and may take some time to be developed. The key factors involved are the quality and the reliability of the information that they have to offer other networks; the higher the quality, the greater the respect that will be afforded to the network from which it is sourced. In the girls' school, those in the lower year groups (Years 11 and 12) had a high level of respect for information that was able to be obtained from those in the senior year group (Year 13, as those in the latter group were the school's leaders and interacted more freely with the teaching staff and the 'adult' world.

Information will still be exchanged with a network that is not respected, however the information that is provided to such a group may not be of the highest quality. This is representative of power and control on the part of the social group that believes it is superior. As respect can be earned, a social network that had previously not had a high value placed on it can increase its status by improving the quality of the information they can supply to others. This, again, is represented by the fact that at the girls' school, the Year 13 girls did not afford as much value to the information gathered from those in the lower year groups, since they as Year 13 students considered themselves to be older, wiser and more sophisticated than those in the lower years.

Tautoko

Tautoko involves the act of supporting those who are part of your group. In some ways it is close to awhina, but rather than assisting the group member it is more about being there for them or encouraging them to take appropriate action, particularly if it is a new experience for them. In some situations this can be viewed in the same context as coaching or mentoring, but at times the act of support will be unequivocal support for a person who is struggling or lacks confidence in what they are doing, even if it is just as simple as being there when their friend or whānau member is encountering a difficult or new situation. An example of this type of support given in one of the focus groups at one of the co-educational schools was related to the support that one social group member had given to others who were not as confident in their use of the public library; the student in question accompanied their friends to the library and assisted them to use the online catalogue and other library resources, as well as introducing them to library staff members that could assist them.

Model characteristics

It should be recognised that, for this model to be effective, individual members need to recognise the extent of their own contribution and the value that others bring to the network. In essence, its effectiveness is highly dependent upon the unity of the network as not every member will possess all fifteen values, but all of them will be either present or being developed within the group. As the network is likely to be undergoing frequent changes in terms of membership and over time, the values may be instilled in a core membership. These changes can also occur from one situation to the next, as social groups and their membership could be different depending on the context in which the group is meeting, i.e. school, cultural or social. The members of a social setting network may differ remarkably from the network found at a marae or at school, and it is not unusual for this to be the case. In fact, when the different networks overlap, information can flow from one group to another through members common to both groups, as an individual in one setting may belong to an entirely different social network to the other people in this setting. When these individuals connect in another network in a different setting they will bring new information from their other groups, which effectively make these individuals 'information carriers'.

It is also important to remember that the formation of these social networks may be continuously evolving and in this regard it could be seen in the same light as the characteristics of group formation identified by Tuckman (1965: 396). He identified small groups as undergoing a four stage process, described as forming, storming, norming and performing. Tuckman describes the process of forming as the stage at which a new group is identifying its leaders and the relationships between the group members. During the storming phase, group members resolve any inter-personal or group conflict issues. Group values and the expected behaviour of members are resolved through the norming stage, and during the performing stages the group is focused on performance.

Tuckman's four stages are best illustrated through the need for flexibility within the social networks I have described in this thesis. In this sense, although the networks are already formed they will need to make allowances for new members. In some instances, these new members will not have all the knowledge and behaviours that existing network members already have. This will require some adjustments within the structure of the network as new recruits and the reformed group go through the forming, norming and storming phases again. This is particularly important for the inclusion of members of cultures who are not Māori or are Māori without grounding in tikanga.

As the focus group results revealed, non-Māori members of social networks were important, as they could provide an alternative stream of information that would otherwise not be available to the group. To all intents and purposes in the forming stage it is the manaakitanga value that is important; although in the model it has been described as respect, it can also mean to be inclusive or to make welcome. Therefore, invoking the manaakitanga value brings these additional dimensions and definitions. The members without the in-depth range of values will, over time, pick up some of the expected behaviours and values but they may never quite understand the cultural significance behind these behaviours, and this will create challenges during the norming stage as conflicting worldviews may collide. For example they will not necessarily understand the spiritual issues around wairuatanga, especially the relationship between tapu and noa. This does not diminish their contribution or status, but it may mean that they have a different level of awareness of the issues or interpretation of the values or behaviours involved, in comparison to that of the Māori participants in the networks. Māori members of the network must ensure that this lack of knowledge does not compromise their own sense of cultural safety. Making the transition from norming to performing will be dependent on a network's stability and the cohesiveness established during the norming stage. If a network is under constant change it may perpetually go through the forming, storming and norming phases without ever reaching its full potential.

The values within the model are all encompassing and mostly inclusive. The different levels of understanding can be attributed to how long an individual has been a member of the group, their worldview and what life experience they have. In some situations, non-Māori may have a deeper understanding of some of these values than the Māori members, who may not have had life experience in an environment based on Māori values and principles. This could easily be the case with the values of legitimacy and reciprocity, whereby non-Māori network members may be more aware of their identity and where they fit into Māori society than Māori who have not had a strong involvement in this context. In seeking to fit in, these non-Māori could also be more conscious of the need for them to contribute to the greater good of the group and would expect that this contribution would be recognised reciprocally. To some extent, this comes back to the notion of some Māori not knowing enough about their own background or the fact that Māori values were not an integral part of their upbringing.

It should be noted that not all fifteen values need to be called upon each time the group comes together or when they interact with another network. The relevance of each of the values to the situation in question will be dependent on the time, place which members are present and what's happening. However, even if not all fifteen values are present, values from each of the overarching principles of strength, identity and humanity will be evident in order for social network members to feel comfortable about seeking, sharing or exchanging information.

Strong ties, weak ties

The work of Granovetter (1973, 1982) on social networks distinguished between strong ties (those whom you are close to) and weak ties (those whom you do not know or partially know), with his theory being that weak ties are more likely to yield better or richer veins of information as it will

be sourced from outside normal information channels. In the Māori framework that has been presented here, the notion of ties is replaced by whānau. In this context whānau can be separated into different categories of whakapapa whānau (relationships based on descent), kaupapa whānau (whānau with a common purpose), whakahoanga whānau (whānau based on friendship) and tauhou whānau (individuals unknown). As one of the key values within the Māori framework is whanaungātanga, those individuals whom one does not already have a relationship with will, when encountered, be assessed and slotted into one of the whānau groups. Those who end up in the tauhou whānau will not necessarily caucus as a whānau, and those who have been categorised in this way will not necessarily have a relationship with each other, because the main criterion for being in this group is that they are relatively unknown to those in the other whānau groups. However, it is also possible that those in this whānau will change status over time and become members of one of the other whānau groups. Essentially, those mentally placed in the tauhou whānau are the weak ties that Granovetter identified. However, classifying them as weak ties is not mana enhancing, thus formal and informal attempts are normally made to try and develop relationships with them. This relationship building may occur as a group or on an individual basis. If it is on a group basis then the individual/s will eventually be accepted or rejected by the group. However, if the relationship building is handled on an individual basis, the new individual will be vouched for by the member of the whānau they have developed a relationship with, thus having their status legitimised through the established whānau member.

Conclusion

This chapter has considered the role that principles and values play in the development of social networks and their ongoing interactions, and has used the results of the data collected in this research and outlined in Chapters Five to Eight to develop a new model that reflects tikanga Māori. This is the greatest contribution that this chapter makes, as it fills

a glaring gap in the information seeking behaviour literature. However, there are three other key findings that are important to gaining an understanding of the model and its application to the information seeking behaviour of Māori secondary school students.

The first of these is the important role that Māori values play under the influence of three key kaupapa, whakakaha, tuakiri and atawhai. These principles provide a moral, social and ethical framework for individuals and social networks. The values represent the behaviour that is expected of those that belong to the network. As the membership and participation levels of these networks are subject to frequent change, the model is flexible and this means that not all fifteen values will be in use every time the network is together. Those in use will depend on the location, who is present and their degree of understanding of the relevance of the values to that situation.

The second key finding relates to the composition of the networks that Māori students are part of, with a strong feature of these being that they are subject to constant changes. As a result they use the values outlined in the model as a means of socialising new members. This is particularly helpful when new members are not Māori or not familiar with tikanga based values.

The third key finding is centred on whanaungātanga and its relationship to Granovetter's theory of strong and weak ties with individuals that are categorised as tauhou whānau. These are individuals who offer potential as new sources of information in the spirit of Granovetter's weak ties principle. However, as one of the core values of tikanga Māori is whanaungātanga, the individuals in this category are potentially future members of the social network so it is not in keeping with the whakapapa and whanaungatanga values to refer to them as weak ties.

In the next, and final chapter, the research questions posed earlier in this thesis will be revisited with a view to identifying what we now know about

information seeking behaviours of Māori secondary school students as a result of this research. There will also be a discussion of the study's limitations and suggested areas for future research.

Chapter Ten

Conclusions

The purpose of this chapter is to return to the research questions I posed in Chapter Four, so we can identify what the research data has provided in the way of evidence and answers. This chapter also provides an opportunity to identify potential topics for future research.

The main research question was *How do Māori secondary school students make sense of the world they live in?* The sub-research questions were *What are the principal sources that Māori students consult when they are seeking information? Do these sources vary according to the cultural context they are searching in? Does strength / weakness of Māori identity play a factor in information seeking behaviours? What information barriers exist for Māori students and do these vary according to the cultural context?*

Making sense of the world and the information resources used to do this

In Chapters One and Two I explored how the information world of Māori has evolved and changed, from creation in Te Kore (the void) through to the digitisation of knowledge in the 21st century, which has resulted in Māori youth having a wide range of resources to select from when seeking information. However, in answering the main research question, how do Māori students make sense of the world, the results from this research indicate that it is by asking other people first rather than using other resources like websites, books, journals, newspapers and other forms of mass media.. The key individuals the students asked were

close friends and peers with whom they shared and exchanged information within social networking situations at school, social and cultural settings. Although the students also identified whanau members as sources of information, others who were seen to have authority over them such as teachers, librarians, counsellors and members of the clergy would not ordinarily be consulted unless there were extenuating circumstances, like not being able to access the information from any other source. In exploring why friends, peers and whānau were preferred sources, the students indicated that this was due to their closeness and shared values. In contrast, they felt that their teachers and other authority figures were more likely to be judgemental and less trustworthy, being more inclined to share information with others. This issue of trust was constant across all four schools where the research was undertaken. The respondents' lack of trust of these authority figures was based on either personal experience or that of fellow social group members. The importance to them of those whom they considered as close and trustworthy was stressed time and time again, and this is reflected through pono (trust) being one of the values in the model discussed in Chapter Nine

The cultural context

The discussion on cultural information seeking in Chapter Seven indicated that there were no differences in the types of sources that were used to find information on Māori cultural topics, with other people once again being the preferred resource. However, although in marae (meeting places) settings information sharing and exchange occurs in groups in the same way they do in school and social situations, at a marae the people that are in these groups are more likely to be made up of individuals of a wider range of ages. This is also the case for those who do not have marae but have cultural experiences through their family homes or those of whānau (extended family) members. The variance in ages leads to the inter-generational transmission of information and knowledge through sharing and exchanging information,

as well as through active and passive learning opportunities made available by the different tasks and responsibilities carried out in the different parts of the marae. The information or new skills learned in these experiences is also able to be shared with their network members in schools and social settings, and can be extremely valuable sources of information to those without access to marae or to whānau that are knowledgeable about tikanga (cultural values), whakapapa (genealogy) or te reo Māori (Māori language). By bringing this information to the group from their own cultural experiences, an individual is able to strengthen the identity and mana (status) of the entire network.

The role of Māori identity

In Chapter Seven, the data relating to different Māori identity indicators were provided. These indicators included knowledge of iwi (tribe), whakapapa, spoken and written te reo Māori abilities and the closeness of a relationship to a marae. The results demonstrated that those students that attended one of the Māori focused boarding schools had stronger identity indicators than those at the mainstream co-educational schools. As discussed in Chapter Seven, this stronger degree of identity is linked to the expectations of their peers and to the schools they attend, having been reinforced from the start of their association with the school. Although students with lower identity indicators might not be as knowledgeable about their whakapapa and iwi affiliations, they were still strongly aware that they are Māori. When the issue of identity and information seeking was explored further in the focus groups, there was a strong correlation between the level of cultural competency and personal confidence in seeking information in the cultural worlds which they are of part. This was demonstrated by those with a high level of competency not hesitating to approach anyone they thought would be able to assist them, regardless of their relationship to them. This same confidence did not appear to be present amongst those without the same level of cultural competency.

Information barriers

The final research question focused on the information barriers that students encountered and whether these vary when cultural contexts change. This question is directly related to the discussion in the last paragraph. The students who had a strong sense of identity as Māori indicated that they had less trouble accessing information in the two cultural worlds they are part of, particularly when it comes to asking others for information. Those who had cultural strengths indicated that they felt confident to approach anyone they thought might be able to give them information, thus restricting the number of barriers they experienced in any context they found themselves. Those students who did not have a strong sense of identity were less confident when asking people, other than people they were close to. Their lack of confidence when they were in a marae context affected their ability to make sense of information important to developing an understanding of their hapu (sub-tribe), tikanga Māori and their own identity.

However, it is clear that there are broader information barrier issues beyond interpersonal interactions. The barriers most frustrating for the students were the difficulties they had in getting access to the internet, and the restrictions that were placed on them by their schools' internet filtering policies. Several students indicated that they had no access to a computer or the internet other than at school, and this meant that they were doubly disadvantaged in comparison to their peers. These barriers meant that at school they could not use the online networking sites their friends used, such as Bebo, MySpace and You Tube, and when searching for information on a topic they could not link to all sites retrieved by the search engine. However, another discovery was the vital role that cell phone technology plays in the daily lives of Māori students. To some degree the use of SMS texting, in particular, between social group members acts not only as a communication tool but also as a quick and effective means of disseminating, sharing and exchanging information with each other. The use of cell phones in part is a substitute

for the limited access to internet technologies, but as a mobile device they provide greater flexibility for those students who use them. The point at which cell phones became a barrier was when students did not have access to one, although these individuals were communicated with in other ways.

The results of the research discussed in Chapter Eight indicated that there was a reluctance to use public or school library facilities when seeking information. At the same time, there was an indication that one of the other major information barriers was getting access to information that is accurate. This reluctance is not only a major issue for students but also for libraries, who need to find a way to break down this barrier and to find better ways of engaging with Māori students. The resources available at libraries would be of major assistance to students in their search for accurate information. By developing the information literacy skills needed to use these resources, Māori students would breakdown many of the information barriers they currently encounter.

Areas for future research

In presenting the results of this project I recognise that there are some limitations, and that these could be explored further in subsequent studies. The limitations of this project include the fact that the study was undertaken in four different types of schools in terms of their orientation. Two were single sex boarding schools with a distinct Māori influence. The other two schools were co-educational, one rurally based and the other urban. Māori were in the minority at both the co-educational schools, with Pakeha (Europeans) being the dominant group and a diverse range of other ethnicities enrolled. The one common denominator across the four schools was their Ministry of Education decile rating, with all four schools being in a similar position at five or six out of ten.

Another limitation was that at all four schools the medium of instruction was English, with many, if not most, of the Māori students having learnt te reo Māori as a second language. As noted earlier in the thesis, there are at least 200 Māori medium schools where te reo Māori is the main language of instruction. It is entirely possible that the students at these schools would have a different perspective on access to Māori knowledge and information seeking. Undertaking a similar research project with students in Māori medium schools would require a researcher to be highly fluent in te reo Māori in order to administer questionnaires and facilitate focus groups. This is currently outside my skill level; however it could be approached in the future in a collaborative manner, by seeking the assistance of a te reo Māori speaker as a co-researcher.

The research for this study was undertaken at a time when the participants had little involvement in virtual social networking sites such as MySpace and Facebook. This was mainly due to the fact that they had unreliable access to the internet at home and filtered access at school. The non-use of these resources was therefore based on a lack of access rather than a lack of interest, as it became apparent throughout the focus group sessions that there was a high degree of awareness of these sites. Future studies are likely to find that use of these resources has increased as the digital divide has decreased.

Another limitation of this study is in the methodology, although I have used a questionnaire and a series of focus groups, with all of these being highly informative and producing a wealth of data about their information seeking behaviours. However, the methodology and the subsequent information gained from these methods may have been enhanced further through the use of observation of participants' behaviours at the places where they gathered and exchanged information. Use of observation may have resulted in the discovery of alternative information behaviours to those already identified through the research instruments already in use. It is also possible that direct observation of these students in these

places could have affected the way they acted and the information they were willing to share or exchange. Although observation could possibly have taken place in an unobtrusive manner, I would not have been totally sure of the different factors taking place within the group itself. Due to the vast difference in ages between the subjects and me (close to a thirty year difference), having me act as an insider was not a viable option as I was closer in age to (or in some cases older than) their parents. However, this might not be a problem in the future for a younger researcher, apart from obtaining ethics approval.

Contributions to knowledge

This thesis is the first comprehensive study of the information behaviour of Māori secondary school students between sixteen and eighteen years of age. The study used Karen E. Fisher's (2003, 2004, 2005) information grounds theory and applied it to an indigenous context for the first time, while tracing the same cohort of participants across different information grounds contexts. This thesis has also drawn on the work of Mark Granovetter (1973, 1982) on strong and weak ties and has concluded that the notion of 'weak ties' does not fit neatly into a tikanga Māori framework as one of the basic tenets of tikanga is that we are all connected by whakapapa, and that a person previously unknown is more than likely to become whānau in the future. The combination of these factors, in association with the use of quantitative and qualitative research methods, has produced results that provide a clearer understanding of how Māori secondary students make sense of the world. The development of the model presented in Chapter Nine is the first model in the wider information behaviour literature to focus on indigenous values and their impact on information seeking behaviour. The model provides a framework for researchers from other indigenous cultures to use or adapt to the values that are important to their own culture. This study also makes a major contribution to our knowledge of the influence of context on information behaviour, particularly when it comes to sharing and exchanging information and the types of

information that are likely to be involved when these activities are taking place in a social networking situation.

In drawing this thesis to a close, it must be remembered, that like many other parts of modern society, the world that Māori youth are involved in is constantly changing and as such the information required to be successful participants in this new age will continue to change accordingly. However, due to the heavy emphasis placed on kinship and friendship, social networks will continue to play an important role in the acquisition and dissemination of information that will assist Māori youth to make sense of the world they live in. The way that these networks operate will still involve close inter-personal contact; however the nature of how this contact occurs will continue to evolve as information and communications technology keeps developing. Having an understanding of the way in which Māori youth value and encounter information is an essential component of ensuring that they fulfil their potential as tomorrow's leaders. This is reflected in the following whakatauki (proverb) that stresses the need for collaboration to reach greatness.

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

Our strength is not only sourced from ourselves but from the many

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APPENDICES

APPENDIX ONE – SURVEY QUESTIONNAIRE



Information Seeking Behaviours of Māori Secondary School Students

Questionnaire

Information Seeking Questionnaire

I am interested in the information seeking behaviours of Māori secondary school students when looking for information about careers, for homework purposes, about whakapapa and tikanga Māori. More information is provided in the sheet that is attached to this form.

Please answer the following questions to the best of your abilities.

SECTION ONE: CAREERS

1. What do you expect to be doing next year? (Please tick)

Returning to school Get a job Study at tertiary level

Travel overseas Not work Undecided

Other (please specify) _____

2. What subjects are you studying this year? (Please tick)

Accounting Economics History Science

Art History English Japanese Technology

Biology French Maths Te reo Māori

Chemistry Geography Physics

Other subjects (Please list)

Career decisions

3. Do you know what kind of job you would like to have in the future?

Yes
(Go to Q.4)

No
(Go to Q.5)

4. If you answered Yes to Question 3, what information resources did you access to assist you in your decision and how useful were they?

Information Sources	Not Useful	Some times Useful	Useful	Quite Useful	Very Useful
<input type="checkbox"/> Part-time job	1	2	3	4	5
<input type="checkbox"/> Work experience scheme	1	2	3	4	5
<input type="checkbox"/> Television/Newspaper/Radio	1	2	3	4	5
<input type="checkbox"/> Careers website (e.g. kiwicareers)	1	2	3	4	5
<input type="checkbox"/> Other internet sites	1	2	3	4	5
<input type="checkbox"/> School library	1	2	3	4	5
<input type="checkbox"/> Public Library	1	2	3	4	5
<input type="checkbox"/> Classroom resources (books/brochures)	1	2	3	4	5
<input type="checkbox"/> People working in careers you are interested in	1	2	3	4	5
<input type="checkbox"/> Friends	1	2	3	4	5
<input type="checkbox"/> Mother	1	2	3	4	5
<input type="checkbox"/> Father	1	2	3	4	5
<input type="checkbox"/> Brother or Sister	1	2	3	4	5
<input type="checkbox"/> Other whanau members(Aunt, Cousin)	1	2	3	4	5
<input type="checkbox"/> School careers advisor	1	2	3	4	5
<input type="checkbox"/> School Hostel Staff (e.g. Matron)	1	2	3	4	5
<input type="checkbox"/> Guidance Counsellor	1	2	3	4	5
<input type="checkbox"/> Careers Expo	1	2	3	4	5
<input type="checkbox"/> Kaumatua/Kuia	1	2	3	4	5
<input type="checkbox"/> Priest/Minister/Pastor	1	2	3	4	5
<input type="checkbox"/> Other _____ (please specify)	1	2	3	4	5

5. If you answered No to Question 3, what information resources have you consulted to assist you in making a decision and how useful have you found them?

Information Sources	Not Useful	Some times Useful	Useful	Quite Useful	Very Useful
<input type="checkbox"/> Part-time job	1	2	3	4	5
<input type="checkbox"/> Work experience scheme	1	2	3	4	5
<input type="checkbox"/> Television/Newspaper/Radio	1	2	3	4	5
<input type="checkbox"/> Careers website (e.g. kiwicareers)	1	2	3	4	5
<input type="checkbox"/> Other internet sites	1	2	3	4	5
<input type="checkbox"/> School library	1	2	3	4	5
<input type="checkbox"/> Public Library	1	2	3	4	5
<input type="checkbox"/> Classroom resources (books/brochures)	1	2	3	4	5
<input type="checkbox"/> People working in careers you are interested in	1	2	3	4	5
<input type="checkbox"/> Friends	1	2	3	4	5
<input type="checkbox"/> Mother	1	2	3	4	5
<input type="checkbox"/> Father	1	2	3	4	5
<input type="checkbox"/> Other whanau members	1	2	3	4	5
<input type="checkbox"/> School careers advisor	1	2	3	4	5
<input type="checkbox"/> School Hostel Staff (e.g. Matron)	1	2	3	4	5
<input type="checkbox"/> Guidance Counsellor	1	2	3	4	5
<input type="checkbox"/> Careers Expo	1	2	3	4	5
<input type="checkbox"/> Kaumatua/Kuia	1	2	3	4	5
<input type="checkbox"/> Priest/Minister/Pastor	1	2	3	4	5
<input type="checkbox"/> Other _____ (please specify)	1	2	3	4	5

SECTION TWO: INFORMATION SEEKING FOR HOMEWORK

**6. On average how much homework do you have each day?
(Tick the most appropriate answer)**

- None
- Up to 1 hour 2-3 hours 4-5 hours
- 1-2 hours 3-4 hours 5 + hours

7. Where do you do your homework? (Tick all that apply)

- At school At home At a friends house At Marae
- At relatives house At School Library At Public Library At parents work
- At homework centre Other (please specify) _____

8. What sources do you consult when looking for information to assist you in doing your homework and how useful are they?

Information Sources	Not Useful	Some times Useful	Useful	Quite Useful	Very Useful
<input type="checkbox"/> Part-time job	1	2	3	4	5
<input type="checkbox"/> Work experience scheme	1	2	3	4	5
<input type="checkbox"/> Television/Newspaper/Radio	1	2	3	4	5
<input type="checkbox"/> Internet sites	1	2	3	4	5
<input type="checkbox"/> School library	1	2	3	4	5
<input type="checkbox"/> Public Library	1	2	3	4	5
<input type="checkbox"/> Classroom resources (books/brochures)	1	2	3	4	5
<input type="checkbox"/> Friends	1	2	3	4	5
<input type="checkbox"/> Mother	1	2	3	4	5
<input type="checkbox"/> Father	1	2	3	4	5
<input type="checkbox"/> Other whanau members	1	2	3	4	5
<input type="checkbox"/> Teacher	1	2	3	4	5
<input type="checkbox"/> School Hostel Staff (e.g. Matron)	1	2	3	4	5
<input type="checkbox"/> Guidance Counsellor	1	2	3	4	5
<input type="checkbox"/> Family friend	1	2	3	4	5
<input type="checkbox"/> Kaumatua/Kuia	1	2	3	4	5
<input type="checkbox"/> Priest/Minister/Pastor	1	2	3	4	5
<input type="checkbox"/> Other _____ (please specify)	1	2	3	4	5

SECTION THREE: WHAKAPAPA INFORMATION

9. What iwi do you affiliate with? (Please list)

10. On average how often do you visit your marae? (Tick the answer closest to yours)

- Never Daily Weekly Monthly Yearly
- 2-3 times per week 3-4 times per week
- 2-3 times per month 3-4 times per month
- 2-3 times per annum 3-4 times per annum
- 4-5 times per annum

11. How well are you able to speak Māori in day to day conversation? (Tick the answer closest to yours)

- No more than a few words or phrases
- Not very well
- Fairly well
- Well
- Very well

12. How well are you able to understand spoken Māori? (Tick the answer closest to yours)

- No more than a few words or phrases
- Not very well
- Fairly well
- Well
- Very well

13. How knowledgeable are you about your whakapapa?

Indicate your level of knowledge on the following table (Please tick all that apply)

- I know the names of my parents and my brothers, sisters, nieces and nephews
- I know the names of my grandparents and their children (on my mother's side)
- I know the names of my grandparents and their children (on my father's side)
- I know the names of my great-grandparents and their children (on my mother's side)
- I know the names of my great-grandparents and their children (on my father's side)
- I know the names of my great-great grandparents and their children (on my mother's side)
- I know the names of my great-great grandparents and their children (on my father's side)
- I know the names of my great-great-great grandparents and their children (on my mothers side)
- I know the names of my great-great-great grandparents and their children (on my father's side)

14. When you want information about whakapapa what sources do you consult and how useful are they?

Information Sources	Not Useful	Some times Useful	Useful	Quite Useful	Very Useful
<input type="checkbox"/> Television/Newspaper/Radio	1	2	3	4	5
<input type="checkbox"/> Internet sites	1	2	3	4	5
<input type="checkbox"/> School library	1	2	3	4	5
<input type="checkbox"/> Public Library	1	2	3	4	5
<input type="checkbox"/> Classroom resources (books/brochures)	1	2	3	4	5
<input type="checkbox"/> Friends	1	2	3	4	5
<input type="checkbox"/> Mother	1	2	3	4	5
<input type="checkbox"/> Father	1	2	3	4	5
<input type="checkbox"/> Other whanau members	1	2	3	4	5
<input type="checkbox"/> Teacher	1	2	3	4	5
<input type="checkbox"/> School Hostel Staff (e.g. Matron)	1	2	3	4	5
<input type="checkbox"/> Guidance Counsellor	1	2	3	4	5
<input type="checkbox"/> Family friend	1	2	3	4	5
<input type="checkbox"/> Kaumatua/Kuia	1	2	3	4	5
<input type="checkbox"/> Priest/Minister/Pastor	1	2	3	4	5
<input type="checkbox"/> Other _____ (please specify)	1	2	3	4	5

SECTION FOUR: TIKANGA MĀORI

15 When you want information about tikanga Māori what sources do you consult and how useful are they?

Information Sources	Not Useful	Some times Useful	Useful	Quite Useful	Very Useful
<input type="checkbox"/> Television/Newspaper/Radio	1	2	3	4	5
<input type="checkbox"/> Internet sites	1	2	3	4	5
<input type="checkbox"/> School library	1	2	3	4	5
<input type="checkbox"/> Public Library	1	2	3	4	5
<input type="checkbox"/> Classroom resources (books/brochures)	1	2	3	4	5
<input type="checkbox"/> Friends	1	2	3	4	5
<input type="checkbox"/> Mother	1	2	3	4	5
<input type="checkbox"/> Father	1	2	3	4	5
<input type="checkbox"/> Other whanau members	1	2	3	4	5
<input type="checkbox"/> Teacher	1	2	3	4	5
<input type="checkbox"/> School Hostel Staff (e.g. Matron)	1	2	3	4	5
<input type="checkbox"/> Guidance Counsellor	1	2	3	4	5
<input type="checkbox"/> Family friend	1	2	3	4	5
<input type="checkbox"/> Kaumatua/Kuia	1	2	3	4	5
<input type="checkbox"/> Priest/Minister/Pastor	1	2	3	4	5
<input type="checkbox"/> Other _____ (please specify)	1	2	3	4	5

SECTION FIVE: INFORMATION ACCESS ISSUES

16. What problems do you encounter when searching for information?

- I don't know what information is required
- I don't know what information sources are available
- I don't know how to identify relevant information sources
- I don't have access to computer and internet facilities
- I can't find what I'm looking for
- I don't like asking questions
- I don't like asking for help
- The information I get is not always correct or accurate
- The information is not always available when I want it
- The people I ask don't always want to help me
- Other (Please state)

17. How often do you access the internet ?(tick the answer closest to you)

- | | | | |
|--------------------|--------------------------|-------------|--------------------------|
| Daily | <input type="checkbox"/> | Fortnightly | <input type="checkbox"/> |
| 2-3 times per week | <input type="checkbox"/> | Monthly | <input type="checkbox"/> |
| Weekly | <input type="checkbox"/> | Never | <input type="checkbox"/> |

18. Where do you access the internet (tick all that apply)

- | | | | | |
|----------------|--------------------------|-----------------|--------------------------|--------------------------------|
| Home | <input type="checkbox"/> | Internet café | <input type="checkbox"/> | Other <input type="checkbox"/> |
| School | <input type="checkbox"/> | Homework centre | <input type="checkbox"/> | (Please state) |
| Public Library | <input type="checkbox"/> | Marae | <input type="checkbox"/> | _____ |
| | | | | _____ |

SECTION SIX: PERSONAL INFORMATION (ABOUT YOU AND YOUR WHANAU)

Information about you

19. **Gender** (Please tick) Male Female
20. **Age** _____ Yrs
21. **Year at School** (Please tick) Year 11 Year 12 Year 13

22. Parents Ethnicity

Father (Tick all that apply)

- NZ Caucasian (Pakeha) NZ Māori Pacific Islander Asian
- Other (Please specify) _____

Mother (Tick all that apply)

- NZ Caucasian (Pakeha) NZ Māori Pacific Islander Asian
- Other (Please specify) _____

23. Parents Education (Please tick the highest educational level attained)

Father

- Attended secondary school
- School certificate
- University entrance
- University bursary
- Tertiary certificate/diploma
- Degree
- Postgraduate degree
- Don't know

Other (please specify).....

Mother

- Attended secondary school
- School certificate
- University entrance
- University bursary
- Tertiary certificate/diploma
- Degree
- Postgraduate degree
- Don't know

Other (please specify).....

General comments

Is there anything else you would like to add about your experiences in seeking information?

APPENDIX TWO – FOCUS GROUP QUESTIONS

Student Focus Group Questions

1) What types of information sources do you consult when seeking information?

2) If you ask others for information, who do you ask (friends, parents, kaumatua, etc.) and why? (Probe for the degree of influence of each category)

3) Does the type of information source / people consulted differ depending on what you want to know?

4) Is there a special place that you go such as the gym, sports practice, marae kitchen, kapa haka, church, café, health provider where you go for a purpose, but end up sharing information because other people are there and you start talking?

What are some examples of information that you might pick up there?

What makes it a good place for picking up information?

5) How do you know that you have the right information?

6) What stops you from getting the information you want? What information barriers have you experienced?

APPENDIX THREE - GLOSSARY

Glossary of Māori words

Ao	World
Ara	Pathway
Aroha	Love, caring for
Arohatanga	To love
Atua	Māori god/deity
Atutahi	Canopus
Awhi, Awhina/tanga	To assist
Ea	Perfection; satisfaction
hā ā koro mā ā kuia mā	Ancestral heritage
Haka	War dance
Hakari	Ceremonial feast
Hangi	Earth oven
Hanihani	Song of shame
Hapu	Pregnant, sub-tribe
Hau	Vitality
Haumiatiketike	God of uncultivated foods
Himene	Hymn
Hinengaro	Mind
Hoe	Paddle
Hui	Meeting
Io	Supreme Being
Io-Matua	Supreme parent
Iwi	Tribe
Iwitanga	Tribalism, tribal pride
Kai	Food
Kaiapa	selfish
Kaihautu	Navigator
Kaihautu Māori	Māori Services Manager
Kaikaranga	Caller
Kaikorero	Speaker
Kaitiakitanga	Guardianship
Kanohi	Face
Kanohi ki te kanohi	Face to face
Kapa haka	Performing arts
Karakia	Prayer, incantation
Karanga	Call
Kaumatua	Male elder
Kaupapa atawhai	Principle of humanity
Kaupapa Māori	Māori principles
Kaupapa tuakiri	Principle of identity
Kaupapa whakakaha	Principle of strength
Kaupapa Whānau	Whānau based on interests
Kauta	Cookhouse
Kawa	Protocol
Kawe Mate	Memorial service
Kia ora	Good health / informal greeting
Kina	Sea eggs
Koha	Gift

Kohanga reo	Language nest
Kōkiri	Warriorship
Kōpō	Venus
Korero	Speak
Koro	Grandfather
Koroua	Male elder / grandfather
Kotahitanga	Unity
Kuia	Female elder
Kumete	Wooden dishes
Kura	School
Kura kaupapa	Māori immersion school
Mahau	Veranda
Mahi-a-ngakau	Work from the heart
Mana	Status / prestige
Mana ake	Uniqueness
Mana tane	Male prestige / status
Mana tangata	Self achievement
Mana tipuna	Ancestral powers
Mana wahine	Female prestige / status
Mana whakahaere	Procedural certainty
Mana whenua	Trustees of land / natural environment
Manaakitaka	Respect, hospitality (Ngai Tahu dialect)
Manaakitanga	Respect, hospitality
Manaakitia	Capacity to share
Mangere	Lazy
Manutioriori	Warriorship
Marae	Meeting place
Marama	Moon; light
Maramataka	Calendar
Matariki	Pleiades
Mātauranga	Knowledge
Mātauranga Māori	Māori knowledge
Mate	Death
Mauri	Life force
Meremere	Venus as an evening star
Mihi	Greeting
Mihi whakatau	Informal welcome
Mihimihi	Informal greetings
Moko	Facial tattoo
Mokomokai	Tattooed shrunken heads
Moteatea	Sung poetry
Ngā Kete o wananga	Baskets of knowledge
Ngā Tama a Rangi	Sons of heaven
Ngeri	Derisive songs
Noa	Safe, profane
Ope	
Orioi	Lullaby
Paepae	Speakers bench / or seating
Pākeha	European New Zealander
Papakainga	Marae based housing
Papatuanuku	Mother Earth
Pareārau	Jupiter
Pataka rahoraho	Storage platforms
Patere	Abusive chant

Pepeha	Cultural identifying chant
Pono	Trust
Pou	Posts
Poupou	Carved posts
Powhiri	Formal welcome
Puanga	Riegel
Pumanawa	Talents
Pupuri taonga	Capacity for guardianship
Rakatirataka	Self determination (Ngai Tahu dialect)
Rakau	Wood
Rangatahi	Youth
Rangatiratanga	Self-determination
Ranginui	Sky Father
Rēhia	Enjoyment
Rehua	Antares
Ringawera	Cooks, kitchen workers
Rohe	District / area
Rongomatane	God of cultivated crops & peace
Ruamoko	God of earthquakes
Runanga	Tribal council
Ta moko	Facial tattoo
Taewa	Māori Potato
Taha hinengaro	Mental health
Taha tinana	Physical health
Taha wairua	Spiritual health
Taha whānau	Family health
Take	Cause / issue
Takurua	Sirius
Tama-rereti	Tail of Scorpion
Tane mahuta	God of the forest
Tangaroa	God of the sea
Tangata whenua	People of the land
Tangihanga	Funeral / burial service
Tāonga	Treasured item
Tapu	Sacred
Tauihu	Canoe prows
Tautoko	Support
Tauroru	Orion's belt
Tautuutu	Reciprocity
Tawhirimatea	God of winds
Te Ao Marama	World of light
Te Ara Tika	The right path
Te Ikaroa	Galaxy
Te Kete Aronui	Basket of everyday knowledge
Te Kete Tuatea	Basket of ritual knowledge
Te Kete Tūāuri	Basket of secular knowledge
Te Kore	The void
Te Po	The night; dark
Te Pō-haehaea	The night streaked with broad light
Te Pō-kerekere	The Intensive night
Te Pō-namunamu ki Te Wheiao	The night inclined towards day
Te Pō-nui	The great night
Te Pō-roa	The long night
Te Pō-tahuri-atu	The night that borders day

Te Pō-tangotango	The night of hesitant exploration
Te Pō-te-kitea	The night of unseeing
Te Pō-te-whāwhā	The night of groping
Te Pō-tiwahatiwha	The night streaked with light
Te Pō-uriuri	Enveloping night
Te Reo Māori	Māori language
Te Taura Whiri o te Reo Māori	Māori Language Commission
Teina	Younger sibling, mentee
Tekoteko	Carved figure at apex of the house
Tika	Right
Tikanga	Protocol / cultural customs
Tinana	Physical health
Tipuna	Ancestor
Tohatohatia	Capacity to share
Tohukataka	Expertise (Ngai Tahu dialect)
Tohunga	Priest/Expert
Tohunga whakairo	Master carver
Tokotoko	Carved staff
Tu	God of war
Tuakana	Older sibling, mentor
Tukutuku	Latticed panels
Tumatauenga	God of war
Tupapapaku	Deceased's corpse
Tupuna	Ancestors
Turangawaewae	Place to stand
Tutua	Slave
Urupa	Family cemetery
Uruuru matua	Basket of ritual knowledge
Uruuru tawhito	Basket of secular knowledge
Uruuru tipua	Basket of occult knowledge
Utu	Revenge; reciprocity
Waha	Mouth
Waha nui	Big mouth
Waharoa	Gateway
Wahine	Female
Waiata	Sung poetry
Waiata aroha	Love song
Waiata tangi	Lament
Wairua	Spirit
Wairuatanga	Spirituality
Waka	Canoe
Waka ama	Canoe racing
Waka huia	Treasure box
Waka tupapaku	Burial chest
Wananga	School of learning
Wene	Jealousy
Whaikorero	Speech
Whakahihi	Vanity
Whakairo	Carving
Whakamā	Shyness / reserved (behaviour)
Whakamana	Capacity to empower / status
Whakamau	To bear a grudge
Whakamōwai	Humility
Whakapapa	Genealogy; legitimacy

Whakapapa Whānau	Whānau based on kinship
Whakatakoto tikanga	Capacity to plan ahead
Whakawhanaungatanga	Networking, relationship building
Whānau	Extended family
Whanaukataka	Extended family (Ngai Tahu dialect)
Whānau pani	Bereaved family
Whanaunga	Relation, e.g. cousin
Whanaungātanga	Networking, relationship building
Whare kauta	Cook shed
Whare Tipuna / Tupuna	Ancestral meeting house
Whare Wananga	School of learning
Whare wharau	Temporary shed
Wharekai	Dining hall
Whare-kai	Dining hall
Wharekura	High school
Wharenui	Meeting house
Wharenui	Meeting house
Whatumanawa	Emotional aspects
Wheke	Octopus