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Title page

The Education Goal of Māori Succeeding 'as Māori': The Case of Time

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Abstract

This research takes the example of time as a means of critiquing the possibilities for the Ministry of Education's achievement goal: 'Māori enjoying and achieving education success as Māori'. The two words 'as Māori', in particular underscore substantial changes for educating Māori learners. According to Durie (2003) education should not only prepare Māori learners to participate in New Zealand society (and the wider world), but importantly, to participate with confidence in Te Ao Māori. For New Zealand schools this is a new direction and requires a revised approach to education for Māori learners. Time is integral to culture. The New Zealand education system, based on Western time, expresses Western culture. Time as it functions in New Zealand schools not only prevents Māori learners from experiencing and practising Māori culture and language, but is also instrumental in assimilating Māori learners into Western cultural frameworks. Starting with Māori notions of time, this research explores the relationship between Māori notions of time and Māori identity as a means of exploring educational practices that enable Māori learners to achieve education success as Māori.

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Ko Ruahine te maunga
Ko Manawatū te awa
Ko Te Rangiwakaewa te tangata
Ko Makirikiri te marae
Ko Ngāti Mutuahi te hapū
Ko Kurahaupō te waka
Ko Rangitāne te iwi
Tīhei Mauri Ora!

Tohua ngā whakatipuranga ki te inu i te puna o te mātauranga
Kia hora ai te whakaruru hau o te ora, ki runga ki te iwi

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Preface

Ko tōu reo
Ko tōku reo
Te tuakiri tangata
Tīhei uriuri!
Tīhei nakonako!

Your voice
My voice

It is an expression of identity
Behold, the message! Behold, the messenger!

(Pohatu, as cited in Ministry of Education, 2009, p. 13)

Voice, in the whakataua-kii or proverb above refers to the voices of all creation animate and inanimate, including the winds, the creatures of the oceans, the trees of the forests, and the peoples of the world. This proverb describes a Māori view in which the world is not singular but a multiplicity of relational worlds connected through whakapapa (genealogy). In this dynamic universe there is no central authority. Instead, relationships are maintained through a creative system of balance and reciprocity (Metge, 1976; Marsden, 1992; Barlow, 1991; Nepe, 1991; Hoskins, 2001, Royal, 2005). This whakataua-kii states that each voice is an expression of identity, and all voices have a right to be heard by virtue of their being. ‘Tīhei uriuri’ – ‘behold the words being spoken and how the message is being conveyed’. ‘Tīhei nakonako’ – ‘behold, take note of who speaks’.

I am Rangitāne, Ngāti Kahungunu and Ngāti Rangiwewehi. So too are my children. We are also citizens of New Zealand and the wider world and have taken on these identities as well. The culture that has most meaning in my life, and which I have deliberately fostered in our home, is Māori culture. Although my children have grown up away from their marae, they know where they are from and the importance of their *tūrangawaewae* or place of belonging as their ancestral home. We do not speak *te reo*

Māori (Māori language) in our home but my children observe *tikanga Māori* (Māori culture) and practice cultural values as part of their day-to-day lives. My children identify as Māori by virtue of both their upbringing and an innate ‘cultural knowing’ inherited through whakapapa.

Te reo Māori and *tikanga Māori*, which are the cornerstones of Māori identity, were not a priority in any of the schools my children attended. In their school lives my children were required to navigate and reposition themselves daily in relation to educational contexts and practices that did not cater for Māori learners. My children have struggled at times to maintain a sense of self and to feel confident about being Māori as a result of their educational experiences. My expectation is that ‘Māori enjoying and achieving education success as Māori’ will address the failure of the New Zealand education system to support Māori children to gain an education without having to compromise or feel conflicted about who they are as Māori. Ka Hikitia expresses a broader hope that my children and future generations of Māori will be able to participate in New Zealand society ‘as Māori’ and that New Zealand society will value the contribution that Māori can make to education, to Te Ao Māori and Te Ao Whānui (the Māori world and wider society).

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Chapter one: The educational goal of Māori succeeding ‘as Māori’: The case of time

Word list: cosmogenic whakapapa (the creation genealogies); *Io* (Source of all Life, Supreme Being); *kaumātua* (elder); *marae* (the complex that incorporates the meeting house, courtyard); *Ngā Atua* (the Forces of Nature); *Ngā Kete o te Wānanga* (the Baskets of Knowledge); *Papatūānuku* (Mother Earth); *pito* (section of the umbilical cord); *pūrākau* (traditional stories); *Ranginui* and *Papatūānuku* (the Primordial Parents); *Te Ao Māori* (the Māori world); *Te Ao Mārama* (the Natural World); *Te Ao Whānui* (the wider world); *te reo Māori* (Māori language); *Te Kore* (the Void, the Nothing); *Te Kore* and *Te Pō* (Void Abyss Night); *Te Pō* (the Ages of Night); *tikanga Māori* (Māori culture); *wā* (Māori notions of time); *whenua* (placenta).

Introduction

This research will examine cultural ideas about time as a means of interrogating the possibilities for the Ministry of Education (2009) achievement goal: ‘Māori enjoying and achieving education success as Māori’. In short, ‘success as Māori’ appears to be an ideal that involves Māori students achieving academic success while maintaining and strengthening their cultural identity. The ideal of a strong cultural identity includes a large range of practices and ideas. One of these is the idea of time and the practices that cultural ideas of time suggest.

Notions of time are at the core of culture and yet, this aspect of culture is seldom considered in current education strategies for Māori. While it is relatively simple, on the surface, to desire educational success ‘as Māori’, to what extent can this be achieved in an educational environment where fundamental cultural assumptions – about time, social relationships, and use of space for example – are already and uncritically in place? I will argue that as time is integral to, and an expression of, culture and therefore significant to the possibilities for Māori learners succeeding ‘as Māori’, that educational ideal implies a far more fundamental shift in educational practices than was envisaged by the policy makers.

‘Māori enjoying and achieving education success as Māori’ is a complex ideal that goes beyond superficial ‘signs’ of culture. According to Durie (2003) it means being equally competent in *Te Ao Māori* and *Te Ao Whānui*. Becoming competent in *Te Ao Māori* has profound meaning for the education system and suggests that radical revisions of the existing system are required if the ideal is to be taken seriously. It suggests that *te reo Māori* and *tikanga Māori* will be experienced and practiced as an everyday part of school life and that teaching and learning practices will enable Māori learners to maintain and enhance their identity ‘as Māori’. Integrating *te reo Māori and tikanga Māori* into the school day and teaching in ways that validate Māori identity has implications for time, which is essential to the experience and practice of culture.

Societies are structured and organised on notions of time that are taken for granted, as though they are ‘objective fact’, but, as theorists have argued, time is a social construct (Harvey, 1990). Western time is a manifestation of the priorities in Western culture and society, and developed within the western world. In the modern western school system the use of time has been modelled on industrialism and the division of time into productive units (Harvey, 1990; Lefebvre & Regulier, 2003; Thompson, 1967). The New Zealand education system, as an expression of the western model, reflects these patterns. The school day is regulated by a fixed timetable, the curriculum is compartmentalised into units of time, schools educate children by age group, and a child’s progress is most likely to be benchmarked against time (as age).

The New Zealand education system, based on Western time, expresses Western culture. All children and teachers within this system consciously and unconsciously take up the cultural patterns and assumptions about time that underpin the system of education and schooling. This has profound consequences for Māori learners. Māori notions of time are gradually supplanted by Western time and Māori learners become assimilated into Western cultural frameworks of meaning. Knowledge, cultural practices and beliefs that are of value to Māori and constitute important aspects associated with Māori identity are eroded and become less and less meaningful.

When time as a fundamental aspect of culture is considered, ‘Māori enjoying and achieving education success as Māori’, starts to deconstruct and unravel. Viewed in

this light, Māori succeeding ‘as Māori’ offers a profound critique of the system. Jones (2007) contends “when *things do not add up* and *when they could never add up*. When they *cannot* and *could not* ‘make sense’ ... [t]hat ... is the generative ground for new ideas...” (p. 3). It is in the tension between two seemingly incompatible notions of time that I will explore the impossibilities and the possibilities for ‘Māori enjoying and achieving education success as Māori’. The impossibilities will allow us to critique the bold and apparently progressive ideals of the system. Exploring possibilities may lead us to discover rich ideas and innovative ways for thinking about education.

This research will take the example of time to explore the impossibilities and possibilities of ‘Māori enjoying and achieving education success as Māori’ and will be guided by the following questions: What are Māori notions of time and how do these compare with leading European theories of time? How are Māori notions of time an expression of, and integral to, Māori identity, *te reo Māori* and *tikanga Māori*? What becomes impossible and what are some possibilities for Māori identity, *te reo Māori* and *tikanga Māori* in English-medium schools when the underlying notions of time in which schools are based are in tension with Māori notions of time? What ideas and new ways of thinking about education can be advanced through this study?

The Ministry of Education's policy on Māori educational success

The phrase ‘Māori enjoying and achieving education success as Māori’ is a deeply complex statement. The two words ‘as Māori’, in particular underscore substantial changes for educating Māori learners. Durie (2003) introduced the goal ‘to live as Māori’ in his Framework for Education Advancement at the Hui Taumata Mātauranga in 2001, with the explanation that “education should be consistent with the goal of enabling Māori to live as Māori” (p. 199). Durie (2003) went on to say that, while *whānau* are primarily responsible for preparing youth to live as Māori, the education sector must also accept responsibility for preparing Māori learners to participate with confidence in *Te Ao Māori*. The point made by Durie was adopted by the Ministry of Education and formalised in the Māori education strategy *Ka Hikitia: Managing for*

Success (Ministry of Education, 2009). At that moment education was redefined for Māori learners and English-medium schools in particular, were left to grapple with the implications of *Ka Hikitia*.

There are two strategies for achieving the Ministry's priority outcome for Māori, the 'Māori Potential Approach' and 'Ako'. The Māori Potential Approach is the underlying philosophy of *Ka Hikitia* and advocates a shift in attitude toward Māori from deficit theorizing (Ministry of Education, 2009). The three principles of the Māori Potential Approach are: "all Māori learners have unlimited potential; all Māori learners have cultural advantage ... [and] all Māori learners are inherently capable of achieving success" (Ministry of Education, 2009, p. 19). The second strategy is 'Ako', which consists of two principles. The first principal urges teachers to foster constructive relationships with Māori learners and to provide quality teaching that reflects and enhances Māori identity, *te reo Māori and tikanga Māori*. The second principle of 'Ako' asks schools to engage with Māori in 'Productive Partnerships' and to acknowledge that Māori have a contribution to make to education and to value that contribution (Ministry of Education, 2009).

Māori identity, *te reo Māori* and *tikanga Māori* are significant to Māori in their personal lives and are therefore significant to Māori in their education (Ministry of Education, 2009). Furthermore, studies show that the achievement of Māori learners improves when their identity, *te reo Māori* and *tikanga Māori* are valued and integrated into the teaching and learning, and experienced as a normal part of daily education (Ministry of Education, 2013). This view is endorsed by leading Māori educators such as Bishop and Berryman (2006), Durie (2001) and Macfarlane (2000). Durie (2003) adds that education fails Māori learners when it fails to acknowledge Māori identity, *te reo Māori* and *tikanga Māori*. The Ministry states that schools and teachers can support Māori learners to succeed 'as Māori' by valuing and affirming their cultural identity.

The aim of this thesis is to critique the deep complexities of the statement 'Māori enjoying and achieving education success as Māori', from the perspective of time. Māori notions of time are therefore, the starting point of this thesis.

Overview of thesis

Māori notions of time

Chapter two presents a set of ideas about Māori notions of time that become the point of reference throughout this thesis.

When I embarked on this thesis, I had little understanding of Māori notions of time, other than that which I had experienced when I was at home on the *marae*. It was on the *marae*, which faces out to the Ruahine ranges, that I first became aware that my experience of time was different to time experienced in my everyday life, and it fascinated me. This awareness of time experienced on the *marae* has always remained with me and guided me as I researched Māori notions of time. However, trying to write about time was an entirely different matter. After all, how does one describe one's experience of time? While I had some knowledge through my 'lived' experience of Māori time, it was the theory of Māori time that I needed, for this thesis.

I began my exploration of Māori notions of time by analysing the creation narratives, in particular, cosmogenic *whakapapa*, *Ngā Kete o te Wānanga* and *pūrākau*. I felt that Māori notions of time could be ascertained by researching an original source of information such as the creation narratives because, as Hoskins (2001), points out "Māori epistemological and ontological frameworks derive from the creation narratives" (p. 5). The Māori creation narratives, as the name implies, depict the creation of the Universe, and therefore depict the nature of reality as observed and understood by Māori in traditional Māori society. It was not surprising, for example, to find that *Ngā Pō* or the nights of the moon, an important marker of time in traditional Māori society (and also in contemporary times), appear in the cosmogenic *whakapapa* as *Te Pō* or the Ages of Night and mark important creative events in the formation of the Universe. Confirmation, in my mind, that the creation narratives were indeed, a reflection of Māori lived reality

The first body of knowledge referred to in my research on Māori notions of time is cosmogenic *whakapapa*. Many of the cosmogenic *whakapapa* researched for this chapter begin with *Io*. Some describe as the Source of all Life; some as a Supreme

Being. It is important to point out however, that traditionally *Io* was not well known amongst Māori (Simpson, 1997; Buck, 1950; Hongi, 1920). On the other hand, Māori scholars such as Marsden, Pohatu and Robinson refer to *Io*. Pohatu, for example, described *Io* as ‘Latent Potentiality’ and in that sense I can appreciate that *Io* might be considered the source of all life as opposed to a Supreme Being (Pohatu, personal comment, September 13, 2010).

Variations of the cosmogenic *whakapapa* were and are held by different *iwi* (Buck, 1950; Salmond, 1985). The cosmogenic *whakapapa* chosen for this essay is based on *Io* and sourced principally from Reverend Maori Marsden. While I don’t necessarily subscribe to the *Io* school of thought, I chose Marsden’s cosmogenic *whakapapa* because Marsden depicts *Io* as the fertile ground (the root-cause) in which the seed of all life forms is sown and nurtured. It seems to me that this portrayal of creation is closely linked to what would have been observable by Māori in their natural habitat, that is to say, life is generated from and rooted in the earth or *Papatūānuku* and so depicts the nature of reality, as understood by Māori in traditional times.

Just as there are different versions of the cosmogenic *whakapapa*, so are there different interpretations of *Ngā Kete o te Wānanga*. My main source of information for *Ngā Kete o te Wānanga* was again Reverend Maori Marsden, and also Tuteira Pohatu, a Ngāti Porou *kaumātua*. *Ngā Kete o te Wānanga* are The Baskets of Knowledge which were obtained from *Io* and again relate to the origins of the Universe, and as such the origins of time in *Te Ao Mārama*.

Finally, I drew on *pūrākau* or traditional stories (some might say mythologies) about *Ranginui* and *Papatūānuku*, their offspring *Ngā Atua* and *Māui* for information about the nature of time in *Te Ao Mārama*. These *pūrākau* relate to the final preparations before *Te Ao Mārama* emerged as the Natural World and humankind was established in the world. For example, the sun, the moon, the stars were placed in the heavens as markers of time, and the seasons were ordered.

Māori notions of time and identity in Te Ao Mārama

My experience of time on the *marae* was different to my experience of time in my everyday life. As a young person however, I did not appreciate that these experiences

of time were fundamental to the cultural practices that took place on our *marae*. Nor did I understand that time was fundamental to my sense of belonging to, and affinity with the land, and to my association with *whānau*, *hapū* and *iwi*, that in fact, Māori notions of time were fundamental to my identity as a Māori.

Chapter three has two purposes: the first is to examine the essential role that Māori notions of time play in the formation of Māori identity and the second is to gain a more comprehensive understanding of Māori notions of time as they were lived and experienced in traditional Māori society. While I acknowledge that *te reo Māori* and *tikanga Māori* are important components of Māori identity, they are not my primary focus in this chapter, or indeed this thesis. Instead, I focus on Māori identity formation in relation to place and kin networks.

Traditionally (and also in modern times), Māori children were bonded with the land. When a child was born, the *whenua* (placenta) and the *pito* (section of the umbilical cord) were taken and placed in *Papatūānuku*. The bond with the land was more significant in a sense than the bond with parents, as children were raised by their community (Pohatu, personal communication, 13 September, 2010). In traditional times, the identity of the child, as highlighted in this cultural practice, was constituted in relation to the land and the child's extended family network. Over time and through Māori notions of time, the bond with the land and kin networks was strengthened and formed an essential feature of Māori identity.

In modern times Māori continue to identify with the land and kin networks. I argue that Māori notions of time are fundamental to living 'as Māori' and are therefore integral to Māori identity formation. Time is a necessary consideration if schools are to support Māori learners to achieve education success, and maintain and enhance their identity 'as Māori'. As Durie (2001) explains "a secure identity demands more than a superficial knowledge of tribal tradition. It depends on easy access to the Māori world – especially Māori language, the extended family network and customary land" (p. 55). Māori notions of time are essential to Māori identity formation, and this requires schools to think about time in different ways.

Western notions of time and education

Schools have not always been required to validate Māori identity, *te reo Māori* and *tikanga Māori* or to prepare Māori learners to participate with confidence in *Te Ao Māori*. In fact, as Penetito (2010) points out “Māori education, beginning in the native schools and in an unbroken sequence to today, has traditionally and currently been used by the state as a mechanism of cultural control rather than for educative purposes” (p. 21). Rather than endorse Māori identity, *te reo Māori* and *tikanga Māori*, successive education policies have sought to assimilate and marginalise Māori (Smith, 2000). Māori identity, *te reo Māori* and *tikanga Māori* have for the most part been ignored in an education system that has centred and acclaimed the superiority of Western cultural values, to the detriment of Māori cultural values (Smith, 1999).

It is difficult to think about schools in the way Foucault (1991) describes them – politically driven machineries of power structured through the operation of the timetable to break down and remake individuals into practiced and docile bodies. Idealistically, we think of schools as creative, educational environments where children learn and grow and discover possibilities for their lives.

Chapter four traces the historical sources of Western time in New Zealand schools in order to gain an understanding of, and to illustrate, some of the ideologies that have shaped and influenced Western notions of time. The ideologies and beliefs about Western time, relating back to the time of Aristotle and Plato coalesced at the time of the industrial revolution. One of the purposes of schools established at that time was to prepare the children of working-class families to work in the factories. The linear, abstract, quantified timetable was adopted as the means for disciplining and controlling learners. Time became a hidden part of the curriculum structured, as Foucault (1991) asserts, to break down the innate time of the learner and to produce a practiced and docile body, fit for working in the factories.

Time in New Zealand schools reflects and fosters Western cultural ideals. The principle means of organising time and learning in New Zealand schools is the timetable, inherited from the British education system. This chapter highlights how the structure and uses of time in New Zealand schools are instrumental in relocating Māori learners within Western frameworks of meaning. The Ministry of Education (2010) states, “to support every Māori learner to achieve to their full potential as

Māori we need an education system that captures and reflects that identity, *te reo Māori and tikanga Māori* are essential ingredients for all learners and critical to the success of Māori learners in education” (p. 24). This statement overlooks the nature of time in New Zealand schools and its use as a hidden part of the curriculum to control and acculturate Māori learners into Western frameworks of meaning.

Please note: In this chapter I draw some conclusions about time use in schools and these are written as italicised paragraphs. My study is not one that researches school processes closely – these conclusions about time use in schools come from my own observations and knowledge. In future research I (or others) can devote detailed research time to the analysis of time in schools.

Wā and Māori Education

Chapter five explores the relationship between *wā*, traditional Māori educational practices and Māori identity formation, and contrasts these with time and educational practices in New Zealand schools. While time in New Zealand schools operate to assimilate Māori learners into Western cultural frameworks, Māori identity, *te reo Māori* and *tikanga Māori* were affirmed on a daily basis in traditional Māori educational practices.

Wā is cyclical, relative, qualitative and dynamic and so was learning in traditional Māori educational settings. Young children learned about their natural environment and about their extended family networks from a close relative, usually a *hākui* or a *koroua*. In this teaching/learning dynamic there was a fine balance between sharing knowledge, guiding the learner and allowing the learner to discover knowledge for himself/herself. Learning took place in context and through doing, and both the teacher and the learner were physically, mentally, emotionally and intuitively engaged in the teaching/learning process. Teaching and learning was not fixed but occurred as the opportunity arose.

What Becomes Impossible and Possible

Succeeding ‘as Māori’ cannot be merely learning about Māori identity, *te reo Māori* and *tikanga Māori* at scheduled times as an abstract exercise and in an ad hoc fashion. Durie (2001) states “a secure [Māori] identity demands more than a superficial

knowledge of tribal tradition. It depends on easy access to the Māori world – especially Māori language, the extended family network and customary land” (p. 55). Furthermore, cultural identity develops over time through opportunities to experience and express culture in day-to-day living.

Chapter six highlights the restricted nature of the opportunities for Māori learners to achieve education success while maintaining and enhancing their identity as Māori in schools organised on Western time. These restrictions have led some educators to attempt a new model for education that reflects aspects of cyclical, relative, qualitative and dynamic *wā*. These are exciting developments for Māori education and two of these schools: Tai Wānanga and Te Whānau o Tupuranga are featured in this chapter. In these schools time is flexible, learning and teaching is a shared experience, and takes place in contexts that are both traditional and contemporary. In these schools, Māori identity is affirmed on a daily basis.

Please note: Some of the observations I make in this chapter and others are in relation to positions that I have held as te reo Māori facilitator and a Te Kotahitanga facilitator.

Chapter two: Māori notions of time

Word list: cosmogenic *whakapapa* (creation genealogy); *Hine-ahu-one* (the female form); *Hine-nui-te Pō* (the Goddess of Death); *Hine-titama* (the Dawn Maid); *hui* (gatherings); *Io-taketake* (creator or root-cause); *Io* (Latent Potentiality); *Io-io-whenua* (the Founder of Natural Cycles); *kaumātua* (respected elders); *mātauranga Māori* (Māori epistemology); *Mokomoko Kākāriki* (Green Lizard); *Ngā Atua* (the Forces of Nature; the offspring of *Ranginui* and *Papatūānuku*); *Ngā Kete o te Wānanga* (the Baskets of Knowledge); *Ngā Rangi* (a reference to the Heavens); *pōwhiri* (official welcoming ceremonies); *pūrākau* (traditional stories); *Ranginui* and *Papatūānuku* (the Primordial Parents); *Rarohenga* (the Underworld); *Rongo mā Tāne* and *Haumia tiketike* (Cultivated and Uncultivated Food); *Tāne* (one of the principal *Atua* or Forces of Nature); *Tāne* (Sun, Light, Fire) ; *Tangaroa* (Sea, Water); *tauparapara* (invocation); *Tāwhirimātea* (Wind, Air); *Te Ao Mārama* (the Natural World); *Te Kore* and *Te Pō* (Void Abyss Night); *Te Pō* (the Ages of Night); *te reo Māori* (Māori language); *tikanga Māori* (Māori culture); *Tūmataurangi* (War); *tupuna* (ancestor); *tūpuna* (ancestors); *wairua* (spirits); *whakapapa* (genealogy).

Introduction

Situating the work

Māori notions of time are the starting point and the cornerstone of this critique of the Ministry of Education’s strategy for Māori student achievement, ‘Māori enjoying and achieving education success as Māori’ (Ministry of Education, 2012). Durie (2003) suggests that achieving ‘as Māori’ means Māori learners will have access to the Māori world so that they can learn about their identity, *te reo Māori* and *tikanga Māori* – thus enabling them to operate comfortably in that world – as well as achieving in the non-Māori world. It is my contention that Māori notions of time are reflected in, and underpin Māori identity, *tikanga Māori*, and *te reo Māori* and before we can seriously consider the possibilities for ‘Māori enjoying and achieving education success as Māori’, we must first have at least some understanding of Māori notions of time.

This chapter seeks to explore the question, ‘What are Māori notions of time?’ This is a question not easily answered, because Māori time is no longer apparent in day-to-

day life. In addition, Western time has begun to encroach on *pōwhiri* and other traditional *hui*. To satisfy this question and to provide a context within which Māori ideas about time can be examined, I turned to a body of knowledge referred to as *mātauranga Māori*, which originated in the metaphysical realm. Such knowledge is expressed through the Māori creation narratives (Hoskins, 2001; Marsden, 1992; Nepe, 1991). These narratives refer to the conception of the universe and the primal genealogies of *Te Ao Mārama*. They form the knowledge base upon which the infrastructure of Māori society was, and continues to be, framed. It is my assertion that time, as understood and practised by Māori, can be more fully conceptualised with further exploration of the creation narratives.

The purpose of this chapter is to research and present a set of ideas about Māori notions of time that can be developed and referred to in the ensuing chapters. To this end, and to provide a framework for this chapter, attention will be directed to the following three categories of creation narrative:

- cosmogenic *whakapapa*, which sets out the stages of the creation of the universe as in a genealogy;
- *Ngā Kete o te Wānanga*, which contain detailed information about the creation of life and the universe; and
- *pūrākau*, specifically those stories associated with *Ranginui* and *Papatūānuku* and their offspring *Ngā Atua*, who appear in the last stages of the creation of the universe, and who are instrumental in creating *Te Ao Mārama*; and finally, one of the stories about Māui, an ancient ancestor who lived in the very early period of *Te Ao Mārama* (Buck, 1950).

These creation narratives span the period from the conception of the universe to its realization as *Te Ao Mārama*. For each of these three categories of creation narrative, I make a statement about Māori notions of time, followed by an explanation supporting or justifying that statement.

The creation narratives

Creation narratives, such as cosmogenic *whakapapa* and *pūrākau*, were a means of presenting complex ideas that were difficult to define – for example, theories of time.

Theories on their own are not sufficient for understanding time because, as Adam (2004) points out, time is both theory and a “lived orientation and material expression” (p. 2). To overcome the difficulty of conveying complex ideas, Māori developed different forms of symbolic storytelling, encoded with complex concepts and multiple layers of meaning, as a way of apprehending and portraying what they perceived to be their ultimate reality (Marsden, 1992). In this chapter, I will elaborate on connections between time and Māori creation narratives, drawing out underlying beliefs or theories that I consider to be relevant to time.

The sources of information for the creation narratives

To broaden and consolidate my personal understanding of Māori theories related to time, extensive research has been essential. The works of the following prominent authors are some of the many readings that I have examined as I learn more about Māori time: Sir Peter Buck, *The Coming of the Māori* (1950); Anne Salmond, ‘Ontological Quarrels: Indigeneity, Exclusion and Citizenship in a Relational World’ (n.d.) and *Between worlds: Early exchanges between Maori and Europeans 1773-1815* (1997); Te Whatahoro, *The lore of the whare-wānanga: teachings of the Maori college on religion, cosmogony, and history* (translated by Percy Smith in 1913), (1998); Joan Metge, *Rautahi: The Māori of New Zealand* (1976); Samuel Robinson, *Tohunga: The Revival: Ancient Knowledge for the Modern Era* (2005); and, less known but of considerable interest, Hare Hongi, *The Gods of Māori worship: Sons of Light* (1920).

Equally important in my quest for information about Māori time was the inclusion of organic knowledge – knowledge gathered as a result of dialogue with *kaumātua*. Conversations with Ngāti Porou *kaumātua* and long-serving educationalist, Tuteira Pohatu, have been instrumental in testing and developing my understanding of pre-European Māori theories about time.

Notwithstanding the aforementioned, it was the work of Reverend Māori Marsden, *The Woven Universe: Selected Writings of Rev. Māori Marsden* (2003), and *God, Man and Universe: A Māori View* (1992) that I drew on to provide a whakapapa setting out the conception of the universe and the place of time in that whakapapa.

Cosmogenic whakapapa

Cosmogenic *whakapapa* provide an important first insight into Māori ideas about time, namely - *time exists in relation to a creative event. I suggest this indicates that for Māori, time is relative and qualitative.*

Cosmogenic *whakapapa* sets out the stages of the universe's creation and the relationship between humankind, *Ngā Atua* and all life in *Te Ao Mārama*. As Barlow (1991) explains, “whakapapa is the genealogical descent of all living things from the gods to the present time” (p. 173). The following cosmogenic *whakapapa*, provided by Reverend Maori Marsden, begins with *Io-taketake* (creator or root-cause) and ends with Heaven Earth (the Natural World), hereafter referred to as *Te Ao Mārama*. Please note, *Io-taketake* also appears later in this chapter in his function as *Io* (Latent Potentiality) and *Io-io-whenua* (the Founder of Natural Cycles):

Io-taketake, creator, root-cause
|
Void Abyss Night
|
Shoot Taproot Laterals Rhizome Hair root
|
Seeking Pursuit Extension Expansion Energy
|
Primordial Memory, Deep Mind
|
Sub-conscious wisdom
|
Seed-word Breath of Life
|
Shape Form
|
Time Space
|

Heaven Earth (The Natural World)

(Marsden, n.d. quoted in Royal, 2003, pp. 31-32)

The cosmogenic *whakapapa* portrayed above illustrates major periods in the creation of the universe. *Io Taketake* is the root-cause and seed-bed of the cosmos, providing fertile ground from which the seed - the root foundation - of all life forms will generate and evolve, eventually manifesting in *Te Ao Mārama*. Sustaining each stage of creation is primal energy. As each evolutionary stage reaches its optimal state, a primal surge of power (rhythmic patterns of energy) carries the creative impulse forward to the next stage of development (Marsden, n.d. quoted in Royal, 2003).

This dynamic unfolding of life takes place in the cosmic space-time continuum of *Te Kore* and *Te Pō*, the realm of Becoming or Potentiality (Marsden, 1992). *Te Pō* represents time as the Ages of Night and has various designations, each of which are significant, for example:

Te Po-tipu	The night of growth
Te Po-rea	The night of development
Te Po-tahuri-atu	The night of extension
Te Po-tahuri-mai	The night of retraction
Te Po-puta	The night of revealing
Te Po-whawha	The night of holding
Te Po-Namunamu-ki-Taiao	The night of seeking passage to the revealed world
Te Po-Tahuri-mai-ki-Taiao	The night of turning towards the revealed world

(Robinson, 2005, p. 20)

Each evolutionary stage in the creation of the universe is defined by the nature of that evolutionary stage or creative event. Likewise time, represented by each of the *Pō*, is dedicated to, and defined by, the nature of that creative event. I conclude therefore that time for Māori is relative to a creative event and, because time is defined by the nature of that event, time is also qualitative. I would venture to add that where there is no creative event, there is no time, that is, a state of timelessness exists.

Ngā Kete o te Wānanga

The body of knowledge found in *Ngā Kete o te Wānanga* contains important ideas about the way Māori view and understand time: *Every period or stage of creation in Te Kore and Te Pō, the realm of Becoming or Potentiality is sustained by rhythmic patterns of energy – and time, as we know it in Te Ao Mārama, arises out of these rhythms or energies. I suggest that, for Māori, time is in every feature of creation and is therefore not only relative and qualitative, but also dynamic.*

Ngā Kete o te Wānanga are referred to in an ancient *tauparapara*, which describes the ascent of *Tāne* to the furthestmost of the esoteric realms, *Te Rangi-tū-hā-hā*. In his ascent, *Tāne* came upon *Io* (Latent Potentiality) and was given three baskets of knowledge: *Te Kete Tū-a-uri*, *Te Kete Tū-ātea* and *Te Kete Aronui*. These baskets relate to the creation of life, the creation of the cosmos and the creation of *Te Ao Mārama* (Pohatu, personal comment, September 13, 2010). For the purpose of this thesis, we will focus on *Te Kete Tū-a-uri* and *Te Kete Tū- ātea*.

Rhythm and time

Te Kete Tū-a-uri contains knowledge about the rhythmic patterns of energy that initiate and sustain creation in *Te Kore* and *Te Pō*, the realm of Becoming or Potentiality (Marsden, 1992; Salmond, 1997). Marsden (1992) describes these rhythmic patterns of energy as: *Mauri*, *Hihiri*, *Mauri-Ora* and *Hau-Ora*. Each of these energies occurs at different stages in the evolutionary process, representing a refining of energy as creation unfolds. *Mauri* occurs in the early stages of creation and interpenetrates all things. *Mauri* has a binding effect. *Hihiri* is a refined form of *Mauri*, and facilitates the development of conscious mind. *Mauri-Ora* is a refinement of *Hihiri*, and *Hau-Ora* is the breath or wind of the spirit, animating all life forms including objects and people.

The knowledge contained in *Te Kete Tū- ātea* relates to the formation of space and time in *Te Ao Mārama*, which arises out of *Hau-Ora*, the breath or wind of the spirit. According to Marsden (1992) when *Hau-Ora* was infused into the realm of *Te Kore* and *Te Pō*, the realm of Becoming or Potentiality, *Ranginui* and *Papatūānuku* and their offspring *Ngā Atua* were brought into existence. Marsden (1992) refers to this

creative process as follows, “Te Hauora begat shape; shape begat form; form begat space; space begat time; and time begat Rangī[nui] and Papa[tūānuku]” (p. 9). The *Hau-Ora* rhythm or energy generates shape, form, space and time, out of which *Ranginui and Papatūānuku* arose, signalling the beginning of *Te Ao Mārama*, the Natural World or the realm of material being.

The rhythmic patterns described by Marsden (1992) as *Mauri, Hihiri, Mauri-Ora* and *Hau-Ora* initiate and sustain creation in *Te Kore* and *Te Pō*, the realm of Becoming, Potentiality. These same rhythmic patterns give rise to time in *Te Ao Mārama* and so we can infer that time is associated with rhythm. Just as each creative stage or event in *Te Kore* and *Te Pō* is initiated and sustained by rhythm, so too is time, referred to as *Te Pō*, initiated and sustained over the period of each creative event. Rhythm, through all its permutations in *Te Kore* and *Te Pō*, becomes time in *Te Ao Mārama* and is manifest in every life form in *Te Ao Mārama* – each of which, therefore, has its own internal sense of rhythm or time. I conclude then, that because time is in every feature of creation in *Te Ao Mārama* and each feature of creation has its own innate sense of time, time for Māori is dynamic.

Pūrākau 1 – Ranginui and Papatūānuku

The stories about *Ranginui* and *Papatūānuku* are considered to be very ancient. They relate to the final stages of *Te Pō*, from which *Te Ao Mārama* emerges (Buck, 1950). The following stories, I contend, contain an important insight into the way Māori view time: ***Time in Te Ao Mārama is cyclical and the sun, the moon and the stars are the orchestrators of cyclical time.***

Confined between *Ranginui* and *Papatūānuku*, within *Te Pō*, *Ngā Atua* became aware of their cramped conditions. Various solutions were discussed as to how they might end their confinement. A quarrel ensued but, in the end, the task fell to *Tāne* to separate *Ranginui* and *Papatūānuku*. Lifting *Ranginui* high above *Papatūānuku*, *Ngā Atua* beheld for the first time “the ancient glimmer of light at the break of dawn” (Robinson, 2005, p.25). As *Ranginui* was held suspended above *Papatūānuku*, *Tāne* established the twelve heavens, referred to as *Ngā Rangi*, and *Papatūānuku* became established as Mother Earth (Te Whatahoro, 1998). By separating *Ranginui* and

Papatūānuku, *Tāne* brought to an end the ages of *Te Pō* and ushered in a new era – *Te Ao Mārama*.

The important markers of time: The sun, the moon, the stars and the seasons

Because *Te Ao Mārama* was so poorly lit, *Tāne*, whose symbol is the Sun, went in search of light. He placed the sun in the sky to shine by day, and the moon in the evening sky to shine by night. To compensate for the softer light of the moon, *Tāne* placed the stars in the heavens, alongside the moon (Buck, 1950). The sun, the moon and the stars, once set on their respective courses, became the regulators of the rhythms and cycles of all life in *Te Ao Mārama*. *Tāne* was regarded as one of the most important children of Heaven and Earth, because he brought light, essential to life in *Te Ao Mārama* (Hongi, 1920).

Some of *Ngā Atua* harboured resentment toward *Tāne* (Sun, Light, Fire) for separating *Ranginui* and *Papatūānuku*. The ensuing war between *Ngā Atua* resulted in the seasons, regulated by the movements of the sun, the moon and the stars in *Te Ao Mārama*. *Tāwhirimātea*, who did not agree to the separation, took revenge on his brothers *Tāne* and *Tangaroa*. *Rongo mā Tāne* and *Haumia tiketike* fled from *Tāwhirimātea* and took refuge within *Papatūānuku*. *Tangaroa* attacked *Tāne* and, in turn, *Tūmataua* vented his rage on his brothers. Adam (2004) states it is “in the interplay between sun/fire and water, the two primary sources of life, the rhythm of the seasons is created” (p. 7). It was *Io-io-whenua* who eventually brought the fighting between the brothers to an end. *Io-io-whenua* means that a natural cycle established itself over the earth, and so the seasons – spring, summer, autumn and winter – and the corresponding growth cycles of all vegetation were established in *Te Ao Mārama* (Robinson, 2005).

The creation of mankind: Mortality is introduced

When *Tāne* ascended to the topmost heaven *Te Rangi-tū-hā-hā* (referred to in *Ngā Kete o te Wānanga*), he was searching for that which had not yet been created: namely, human life (Pohatu, personal comment, September 13, 2010). After receiving *Ngā Kete o te Wānanga*, *Tāne* returned to *Te Ao Mārama* whereupon he and his siblings set about fashioning the human form. *Hine-ahu-one* was fashioned from the sacred earth at *Kurawaka* by *Tāne*, *Tangaroa*, *Tāwhirimātea* and the other *Atua*, who all contributed to the form and character of *Hine-ahu-one* (Pohatu, personal comment,

September 13, 2010). *Tāne* procreated with *Hine-ahu-one*, and *Hine-titama*, the first human being, was born. *Tāne* then procreated with *Hine-titama*, and their daughters became the progenitors of mankind.

When *Hine-titama* realized that *Tāne* was both her husband and her father, she was consumed with shame. Fleeing *Tāne*, she journeyed to the end of the earth where she began her descent into *Rarohenga*. *Tāne* pursued her, but she admonished him, telling him to return to their family and care for them in the world – saying, “until emaciation and failure of health bring them to me, I will catch the ‘living spirit’” (Te Whatahoro, 1998, p. 146). Thus *Hine-titama* became *Hine-nui-te Pō* who draws the souls of mankind to *Te Pō* (a reference to the Underworld) at the conclusion of their lives. Death or mortality was therefore introduced into *Te Ao Mārama*.

Pūrākau 2 – Māui

Māui, an ancient *tupuna* living in the early period of *Te Ao Mārama*, and renowned for his provocative and challenging behaviour, attempted to overcome death for mankind. He waited until *Hine-nui-te-Pō* was asleep and, turning himself into a *Mokomoko Kākāriki*, *Māui* attempted to enter the passage to *Hine-nui-te-Pō*'s womb. *Pīwaiwaka*, the fantail, who was witness to this extraordinary spectacle, could not contain his laughter, causing *Hine-nui-te-Pō* to awaken and crush *Māui* (or more to the point, *Mokomoko Kākāriki*) between her thighs (Pohatu, personal comment, September 13, 2010). *Māui*'s attempt to secure immortality for mankind failed and so the path of death was established, forever drawing the souls of mankind towards *Hine-nui-te-Pō* and *Rarohenga* (Robinson, 2005). The cycle of life and death was now established in *Te Ao Mārama*.

The cyclical nature of time in Te Ao Mārama

The story about *Tāne*, *Hine-titama* and *Hine-nui-te-Pō* is a metaphor for the cyclical nature of life and death in *Te Ao Mārama*. The sun rises in the morning when *Tāne* gives rise to *Hine-titama*. The sun traverses the sky, when *Hine-titama* flees and *Tāne* pursues her (Te Whatahoro, 1998). And, at the close of day, the sun sets when *Hine-titama* becomes *Hine-nui-te-Pō* and descends in to *Rarohenga*. The rising and setting of the sun regulates the rhythms of life and all that lives. All things are born, have form and unfold their nature. According to Robinson (2005), *Hine-nui-te-Pō* “is said

to let time pass and causes things to age” (p. 130). As a consequence, time passes, the ageing process occurs and, at the conclusion of life, just as *Hine-titama* becomes *Hine nui-te-Pō*, form is relinquished, and the spirit descends into *Rarohenga* (*Te Pō* is also a reference to the Underworld).

The universe is not a closed system

With the formation of *Te Ao Mārama*, two contrasting realms now exist:

1. the invisible realms – *Te Kore* and *Te Pō*, the realm of Becoming, Potentiality, and *Ngā Rangī*; and
2. the material realm - *Te Ao Mārama*.

The invisible realms and the material realm are contrasting but interconnecting realms and there is constant interplay between the two. This highlights, I believe, two important ideas about time in *Te Ao Mārama*: ***Time in Te Ao Mārama is characterized by finite time and timelessness.***

Māori understand that the cycle of life and death is a feature of *Te Ao Mārama* but that death is something of an illusion. The sun sets in the evening, but rises again each morning, and so death is not final. As Metge (1976) explains, Hine nui-te-Pō was not only the Goddess of Death, but also the Goddess of Conception and Childbirth. *Te Pō* was “a womb in which new life was generated out of death, the realm not only of endings but also of new beginnings” (p. 56). There is a constant flow between the invisible realms and the material realm as the *wairua* of the departed return to the invisible realms, and that, which is in the process of ‘becoming’ ascends to the material realm or *Te Ao Mārama* (Marsden, 1992). Life and death are constantly occurring, and life in the material world is sustained from the invisible realms of *Te Kore* and *Te Pō*.

Taking the idea of the interchange between the invisible and material realms a step further, Pohatu emphasises that

In former times the invisible realms and the material realm were not referred to as different realms; they were viewed as different states of the same realm –

just as tapu and noa are one in the same, just as day and night are contrasting states of the same world. (Personal comment, September 13, 2010)

Salmond (2011) elaborates on this idea, pointing out that Māori view reality as an “unbounded whole”, where boundaries are thresholds, not impermeable dividers (p. 9). *Hine-titama* is *Hine-nui-te-Pō*, one and the same – albeit contrasting states of the same being. Thus life and death, the material and the non-material, are alternating states. The material is a manifestation of the non-material; when it fails, it reverts to its non-material state. Life is conceived; it goes forth into the world of being, but at the end of its physical life, it always reverts to its origins or source.

Two states of time exist in *Te Ao Mārama*: finite time and timelessness

Two realities exist in the Māori world: the invisible realms, which transcend time and space (Metge, 1976); and the material realm of *Te Ao Mārama*, in which life and death are constantly occurring. The invisible realms and *Te Ao Mārama* are interconnected (Salmond, 2011). Because the invisible realms transcend time and space, I suggest the invisible realms can be thought of as timeless. Time in *Te Ao Mārama* on the other hand is cyclical. Life takes form, time passes and death occurs. When death occurs, form is relinquished and the spirit returns to *Rarohenga*, where the cycle of life and death begins again (Metge, 1976). Time in this sense is also timeless. However, the life and death of any given being occurs within a contained but unspecified period of time and so I conclude that there are two states of time in *Te Ao Mārama*: finite time and timelessness.

Conclusion

The aim of this chapter was to discern Māori notions of time from the creation narratives, which form part of the body of knowledge referred to as *mātauranga Māori*. Three sets of ideas about the way Māori perceive time have been noted:

Time in *Te Ao Mārama* is relative, qualitative and dynamic

The first set of ideas about time is drawn from cosmogenic *whakapapa* and *Ngā Kete o te Wānanga*:

Cosmogenic *whakapapa* and *Ngā Kete o te Wānanga* depict the origins of the universe as a series of evolutionary or creative stages that take place in the Space - Time continuum of *Te Kore* and *Te Pō*. Time is represented as a series of *Pō*, each of which relates to, and is defined by, a specific creative event in the process of creation. The duration of each *Pō* is determined by the nature of the event itself and the proper fulfilment of that event. Time is therefore relative to that creative event and because it is defined by, or describes that event, time is also qualitative.

The creation of the universe is initiated and sustained by rhythmic patterns of energy referred to as *Mauri*, *Hihiri*, *Mauri-Ora* and *Hau-Ora*. These rhythms occur at different stages as creation progresses. According to Marsden (1992), time has its own *whakapapa* arising out of the *Hau Ora* rhythm. Rhythm takes form as time in *Te Ao Mārama* and is manifested in and through every form of life in the *Te Ao Mārama*. Time for Maori, is therefore dynamic.

Time in *Te Ao Mārama* is cyclical and the sun, the moon and the stars are the orchestrators of the cycles

The second set of insights about the way Māori perceive time is found in *pūrākau* about *Ranginui* and *Papatūānuku* and *Maui*. These stories relate to the last stages in the creation of the universe when *Te Ao Mārama* emergence:

Two important events occurred during this period, which determined the nature of time in *Te Ao Mārama*. Firstly, *Tāne*, whose symbol is the sun, placed the sun, the moon and the stars in the heavens to give light and life to *Papatūānuku*. Secondly, *Tāne* created the first human being, *Hine-titama*. The story about *Tāne* and *Hine-titama* who becomes *Hine-nui-Te Pō* is on the one hand a story about the creation of mankind and mortality, and at the same time a reference to the movement of the sun as it rises in the morning, moves across the sky and sets in the evening. Interweaving the creation of mankind with the cyclical movements of the sun is not only a reference to the cyclical nature of life and death in *Te Ao Mārama* but also to the importance of the sun, the moon and the stars as the great orchestrators of time.

Time in *Te Ao Mārama* is characterized by finite time and timelessness

The third set of ideas about time relates to the cyclical nature of life and death in *Te Ao Mārama*.

While time in *Te Ao Mārama* is cyclical, the timeless dimension of the invisible realms also exists in *Te Ao Mārama*. Reality, according to Māori, consists of two complementary realms, the invisible realms and *Te Ao Mārama*. These realms are not separate entities but contrasting states of an unbounded whole. There is a constant flow between the invisible realms and *Te Ao Mārama* as life and death occurs, and in this sense time in *Te Ao Mārama* is timeless. However, life occurs within a contained but unspecified period of time and so time in *Te Ao Mārama* is distinguished by finite time, and timelessness.

The next chapter will show how these concepts about time, as depicted in the creation narratives, are represented in traditional Māori society as a ‘lived reality’ and how these notions of time are integral to the formation of Māori identity.

Chapter three: Māori notions of time and identity in *Te Ao Mārama*

Word list: *ariki* (paramount chief); *hapū* (sub-tribe); *hau* (characteristic essence); *iwi* (tribe); *kanohi ki te kanohi* (face-to-face); *maara* (garden); *mana* (authority); *Matariki* (the Pleiades); *mauri* (dynamic life force); *Ngā Atua* (the Forces of Nature); *ngā marama* (the moons); *ngā pō* (the nights); *ngā wāhanga* (the seasons); *Papatuanuku* (Earth Mother); *pou* (carved posts); *pōwhiri* (official welcoming ceremony); *pūrākau* (traditional stories); *Ranginui* (Sky Father); *rohe* (region); *taonga tuku iho* (treasured legacy); *tangata whenua* (people of the land); *tapu* (sanctity); *Te Ao Māori* (the Māori world); *Te Ao Mārama* (the Natural World); *Te Ao Whānui* (the wider world); *te reo Māori* (Māori language); *tikanga Māori* (Māori culture); *tohunga* (priest); *tuakana/teina* (older more knowledgeable sibling/younger less expert sibling); *tūpuna* (ancestors); *utu* (balance and reciprocity); *wā* (Māori notions of time); *whakapapa* (genealogy); *whakawhanaungatanga* (creating and maintaining relationships); *whānau* (extended family); *whanaungatanga* (relationship, kinship, connection); *whare whakairo* (carved meeting house).

Introduction

Situating the work

In the previous chapter I put forward theories about the way Māori understand time in *Te Ao Mārama* based on an analysis of the creation narratives. These theories are as follows: time in *Te Ao Mārama* is cyclical and the sun, the moon and the stars are the orchestrators of cyclical time; time in *Te Ao Mārama* is relative, and therefore also qualitative and dynamic; and finally, two contrasting states of time exist in *Te Ao Mārama*: contained but unspecified periods of time, and timelessness. These theories about time will form the basis of my argument that Māori notions of time are central to living ‘as Māori’ and are therefore integral to Māori identity, *tikanga Māori*, and *te reo Māori*.

Ka Hikitia, the Ministry of Education’s strategy for ‘Māori enjoying and achieving education success as Māori’, asserts that opportunities to learn about and experience

Māori identity, *tikanga Māori* and *te reo Māori* are significant to Māori learners and are the necessary platform from which to succeed in education and *Te Ao Whānui* (Ministry of Education, 2009); Ministry of Education, 2013). Durie (2003) endorses the importance of a secure identity to Māori well-being, but adds that Māori learners need meaningful contact with *te reo* and *tikanga Māori* and meaningful opportunities to learn about Māori identity. Concentrating on time and identity formation as an example, I argue that Māori notions of time are integral to the formation of Māori identity, and that the aspirations proposed in *Ka Hikitia* cannot be fully appreciated in New Zealand schools without considering the relationship between time and identity.

This chapter will show that Māori notions of time constitute a framework of meaning for Māori and, as such, have implications for New Zealand schools if the Ministry of Education is serious about providing meaningful environments that support Māori learners and the formation of Māori identity. The aims of this chapter are: to consolidate and extend our understanding of Māori theories of time by looking at time as it was experienced in traditional Māori life; to gain an appreciation for the essential role that Māori notions of time play in the formation of identity and in Māori students feeling confident in *Te Ao Māori*; and finally, to present some possibilities for Māori perspectives on time in New Zealand schools, and the opportunities that might arise as a result for Māori learners' education and indeed all learners.

This discussion will be guided by the following questions, which will form the overall structure of this chapter: How is Māori identity constituted? How are Māori notions of time integral to Māori identity? What does this tell us about distinctive Māori approaches to time in *Te Ao Mārama*? What are some implications for 'Māori enjoying and achieving education success as Māori'?

Māori identity

Whanaungatanga

The concept of *whanaungatanga* is the key to understanding Māori identity. Whanaungatanga is powerfully expressed in the creation narratives as noted by Durie (1998) when he stated, "in creation beliefs Māori descend from the earth mother and sky father and through them have genealogical connections to all living things" (p.

49). Not only do Māori see themselves in relation to all living things, Māori also see themselves as participants in creation (Rangihau, 1992). Essential to this belief in the connectedness of all life and the responsibility these relationships engender is *whanaungatanga*. *Whanaungatanga* defines the way Māori understand the world and the way Māori relate to their world (Royal, 2005). If the universe is perceived as a unified system of multiple world dimensions, then Māori identity ultimately rests in its connection to that unified whole (Salmond, 2011).

While Māori enjoy and identify with many aspects of *Te Ao Whānui*, they continue to declare their genealogical connection to all living things through *pepeha*, a stylised form of introduction. For instance,

Ko Ruahine te maunga	Ruahine is the mountain
Ko Manawatū te awa	Manawatū is the river
Ko Rangitāne te tangata	Rangitāne is the founding ancestor
Ko Rangitāne te iwi	Rangitāne is the tribe
Ko Ngāti Mutu-ahi te hapū	Ngāti Mutu-ahi is the sub-tribe
Ko Makirikiri te marae	Makirikiri is the marae.

In this *pepeha* the speaker makes a claim about his/her genealogical relationship with a particular place (through prominent landmarks), and people (through a founding *tupuna* or ancestor and associated tribal networks). As shown here, *pepeha* are an affirmation of Māori identity, which is primarily constituted in relation to place and tribal networks (henceforth referred to as kin networks).

Māori notions of time and Māori identity

It is my view that Māori learners cannot begin to understand fundamental connections to place and kin networks, the sources of Māori identity, without an understanding of Māori notions of time. What part then, does time play in the formation of Māori identity? This question will be answered in two parts: time and identity with place; and time and identity with kin networks. In both parts I present a very traditional model of Māori life in order to fully explore the relationship with place and the

significance of kin networks. The first part will focus our attention on Māori notions of time and identity with place.

Māori notions of time and identity with place

In former times (and to some extent now), each *hapū* developed a relationship with the *rohe* they inhabited (Collier, 2009) through their understanding of time as it occurred in the natural environment. Economic activity was central to the organization of traditional Māori life (Firth, 1929; Reeves, 1899). As Metge (1976) explained, “the whole of Maori life was firmly based on an annual cycle of food-getting” (p. 10). The well-being and survival of each *hapū* was contingent upon their intimate acquaintance with their natural surroundings. Indicators of time were in nature’s cycles and informed Māori when to hunt and fish, and when to plant and harvest food. The accumulation of empirical knowledge, through time as it occurred in the *rohe* Māori inhabited, and Māori belief in the connectedness of all life led to an enduring relationship with the land.

Qualitative time: the relationship with place

The expressions used by Māori to denote time in day-to-day living informed Māori about the natural environment they inhabited. One of the principle divisions of time in *Te Ao Mārama* is *ngā marama* (Best, 1922). The following is an example taken from a list of *marama* supplied to Best (1922) by Tutakangahau, a Tuhoe elder, “PIPIRI. Kua pipiri ngā mea katoa i te whenua i te matao, me te tangata. All things on earth cohere owing to the cold; likewise man” (p. 15). All *marama*, as in the example provided, have proper names and describe the conditions occurring in nature during that particular *marama*, highlighting that Māori time is qualitative. When Māori refer to *ngā marama* they are not only indicators of time, but also sources of information about the conditions and the changes occurring in nature.

The expressions that denote time were not only sources of information but also a reminder of the relationship Māori have with their environment. Each *marama* is divided into a system of *pō* and the names of each *pō* correspond to the phases of the moon. For example, *Tirea*, the second night of the moon “is when ‘feeble radiance of moon seen’” (Best, 1959, quoted in Roberts, Weko & Clarke, 2006, p. 9). Moreover,

ngā pō were characterised according to conditions appropriate for securing food. Best (1922) noted “the Maori husbandman planted his sweet potatoes during the Otane and Orongonui phases of the moon, thus showing that he recognised the powers of sun and moon in connection with the growth of crops” (p. 5). These practices varied from *hapū* to *hapū*, as each *hapū* interpreted the phases of the moon in relation to the land they inhabited. The relationship each *hapū* developed with the land was informed by the indicators of time, in this case the phases of the moon, and the correlation between time and place.

Wā

The Ōtāne and Ōrongonui phases of the moon were indicators of time (or *wā*) in which sweet potatoes were planted. *Wā* is the underlying concept that explains Māori time in *Te Ao Mārama*. Although *wā* is often translated as ‘time’, it does not mean ‘time’ in the Western sense (Pohatu, personal comment, September 13, 2010). Referring to *wā*, Johansen (1954) stated, “its most important function is that of containing definite events” (p. 153), for example, the planting of sweet potatoes. The *wā* for planting sweet potato was initiated by the Ōtāne and Ōrongonui phases of the moon and the activity was sustained during this period. However, when the conditions appropriate for planting kumara ceased, the activity ceased, *wā* ceased; timelessness resumed. To paraphrase Metge (1976) *wā* stops and starts in relation to nature’s cycles, which determined when food gathering and cultivation occurred.

***Wā* is relative: responding to nature’s cycles**

Each *hapū* was part of an intricate ecosystem, keeping time with the movement of the sun, the moon and the stars, which in turn directed the rhythms (timing) of all other life forms in their region. The most significant of the stars was *Matariki* (Collier, 2009; Best, 1922). The advent of *Matariki* signalled the beginning of the Māori year, which was greeted with emotion and celebration (Best, 1922). Collier (2009) commented, “it was at this time that my uncle laid out the new maara with a mathematical precision based on a knowledge system that preceded Galileo’s discourse on the relationship of the moon and the tides” (p. 13). It is clear from this account that Māori had a very intimate knowledge of their environment. It is also clear that Māori time is not fixed, nor abstracted from the natural world, but relative to the changes occurring in nature. The appearance of *Matariki* set in motion a

sequence of events and Māori, who were not just part of nature but “were nature” (Pohatu, personal comment, September 13, 2010), responded in turn by preparing for the new cycle of planting and harvesting.

***Wā* is dynamic: living in accord with the natural environment**

Māori lived their lives in concert with nature’s cycles to the extent that their lives were interwoven with that of their natural surroundings, adjusting and responding as nature’s cycles dictated. Sadlier, as cited in Collier (2009), illustrates this point in the following quote:

When Puanga shone brightest of Te Huihui o Matariki (the assembly of the Pleiades) we knew that the soil was beginning to warm up. When that happened the trees began to flower and that flowering was the symbol for sowing and fertilising your seeds. It was also a symbol that certain shellfish were in prime condition. There were other stars attached to Ranginui’s cloak ... that indicated when to sow specific seeds at that time. Tauroru ... and Whakuahu ... would appear and we put in the potatoes and corn. When the maara were all bedded down, we waited for the appearance of Autahi ... She was the main star for navigating to the fishing grounds offshore. (p. 14)

This account reiterates the notion that time was located in every feature of creation, and time was understood by Māori as dynamic and a symphony of that connectedness. It is also apparent that Māori identity was embedded in the region they inhabited through their understanding of time as it occurred in nature in their day-to-day lives.

***Wā*: preserving the relationship with the land**

Māori existed in a symbiotic relationship with their natural environment (Hoskins, 2001), taking food or resources, only when the time or signs in nature were propitious to ensure that the *mauri* of each species was maintained. The use of resources, however, was not just a matter of sustainability and survival. The primary emphasis was on maintaining an appropriate relationship with the resource in question and the land as a whole (Salmond, 2011; Durie, 1998; Rangihau, 1992). Intrinsic to each life form in *Te Ao Mārama*, is *mauri*, a dynamic life force, which generates ‘vigour,

impetus and potentiality’ (Durie, 2001). Durie (2001) adds, “the mauri of one object retains its momentum not because of its intrinsic qualities alone but because of its relationship with the mauri of others” (p. x). Māori were aware of this dynamic and were constantly negotiating relationships and endeavouring to preserve *utu* within their natural environment (Salmond, 1997) through their observation of time in nature.

It is not enough, then, to say that Māori identify with their natural environment. *Papatūānuku* and *Ranginui* were the primordial parents and all life, including man, originated from *Papatūānuku* and *Ranginui* through *Ngā Atua*. In a world that was understood as relational, the principal consideration for Māori was the relationship with the natural environment and the land, not purely for sustainability but to ensure that the ‘vigour, impetus and potentiality’ of the land was preserved. For Māori, time had meaning relative to the changes occurring in nature. Through their observation and knowledge of nature’s cycles in their respective regions, and their adherence to those cycles, Māori upheld their relationship with the land as co-creators and participants in life. The land and the natural environment therefore, necessarily formed an essential feature of the Māori psyche and identity.

***Wā* and identity with kin networks**

The first part of this section demonstrated that Māori developed an intimate relationship with the *rohe* they inhabited through their understanding of time as it occurred in the land. Equally important to Māori identity is kin networks. The second part of this section looks at three important sources of identity with kin networks: *iwi*; *tūpuna*; the past. I argue that *wā* facilitates the connection with *iwi*, *tūpuna* and the past, all of which are fundamental to Māori identity.

***Wā* is the key to the past**

Wā is cyclical and this is the key to understanding the relationship Māori have with the past. The movement of the sun, the orchestrator of cyclical time in *Te Ao Mārama* conveys the notion that the past does not precede the present; the past exists in parallel with the present (Binney, 1987). Soutar (1991) clarifies this point with the following analogy:

Time was like a balloon with a vast array of spots painted on it being steadily blown up. One spot representing the individual, the others representing past events. As time passes, the balloon continues to expand. As more events occur additional spots appear on the surface of the balloon. Regardless of the degree of expansion of the balloon, the spots never disappear. They continue to surround the individual. (pp. 78-79)

Looking down upon Soutar's balloon, one can appreciate the fine line between the present and the past, as all events are stored in the mind. One can also appreciate, given Soutar's model, that the past is very much part of the present for Māori. The future also has its presence in this arrangement and is informed by the past and the present (Soutar, 1991).

Wā and identity with iwi

In Māori thinking, timeframes entwine the past including the realms of *Ngā Atua*, the present and the future. Māori believe that the past exists in parallel with the present and that the invisible and the material realms, contrasting states of an unbounded whole, are interconnected (Salmond, 2011). As a consequence Māori perceive their lives within the greater life of the *iwi*. Whereas Māori acknowledge and nurture individuality, "Māori see the individual as part of the group, his life and death as part of an on-going life that outlasts his" (Metge, 1976, p. 57). Māori identity is understood within the context of the *whānau*, which is incorporated into larger and multiple *hapū* and *iwi* networks.

The past is not disconnected from the present but gives context to the identity of the *iwi* and its members. Soutar (1991), quoting a speech about the early nineteenth century Ngā Puhi raids against Ngāti Porou, illustrates this point:

He pu! He pu!	O' the musket! O' the musket!
Na te pu i mate ai au	T'was by the musket that I
a Ngati Porou i a Ngapuhi	Ngati Porou was killed by Ngapuhi
Mehemea he taiaha ki te	If it had been with traditional
taiaha	weapons

Kaore i mate au

I would not have been defeated. (p. 82)

This speech was made in 1982 and the speaker places himself in the context of the event, as if he was personally there, which of course he was not. This highlights an important belief about *wā*: in between defined events the passage of time does not exist (the notion of timelessness). It is evident in this speech that *iwi* are an important source of identity for Māori. It is also evident that the past can be called into the present and experienced as though the passage of time does not exist.

Wā and identity with tūpuna

Because timeframes encompass the past, including the invisible realms, the identity of the *iwi* and its members is associated with those *tūpuna* who have gone before (Salmond, 1997). This sense of connection to *tūpuna* was captured in an interview with Hohepa Kereopa, a Tuhoe *tohunga*. Kereopa (n.d. quoted in Moon, 2003) explained:

I was weaving a kete. And this old tohunga took me into another world. He said that to start off a kete, you have a knot, to start off the weaving, and each strap represents man. So you get them and you plait them on to the three-way plait. And that's the journey through life. Now, imagine a long plait, with the fibres all bound together, and yet the leaves of the flax strands have withered away. Those are our ancestors who have passed on, yet they are still tied on to the rope of man, all the way back to your creator – to the knot at the beginning. (p. 47)

Tūpuna are woven into the fabric of the *iwi*, and into the lives of their descendants. As such, *tūpuna* are not confined to the past, but are considered to be ever present and continually engaged with the living (Metge, 1976).

When Māori refer to their *tūpuna* and important events in history, it is as if the passage of time disappears (the notion of timelessness applies) (Soutar, 1991). The extent to which Māori identify with their *tūpuna* is highlighted by Johansen (1954) who states, “ancestors lived on in the history of kinship groups and as such their lives

were the same as those of the living” (p. 161). Johansen illustrated this point with the following story, which has been paraphrased below:

Kupe, a revered ancestor, is credited as being one of the earliest explorers to voyage to New Zealand from Hawaiki (mythical homeland). When Turi wanted to travel to New Zealand, he asked Kupe to accompany him. Kupe replied ‘e hoki a Kupe?’ or ‘should Kupe return?’ indicating that he had no intention of returning to New Zealand. Several generations later a young woman named Puhihuia abandoned her husband to elope with her lover. Her people implored her to return to her husband, to which Puhihuia responded ‘e hoki a Kupe?’ (Johansen, 1954, p. 163)

This was a precarious situation for Puhihuia and her people, as her actions might have resulted in a dispute. However in recalling Kupe and this event, the passage of time was eliminated as the past was brought to bear in the present. Puhihuia, by invoking her ancestor Kupe, took on his persona and *mana* and, in so doing, conveyed her resolve that she would not be returning to her husband. The reference to Kupe was understood and the matter concluded.

The story of Puhihuia illustrates the point that Māori identity is linked to that of their *tūpuna*. However, Puhihuia was not just identifying with Kupe in a figurative sense she was identifying with him in a literal sense. As Salmond (1997) explains “when rangatira spoke of their ancestors as ‘ahau’, or ‘I’, it was because they were the ‘living face’ of those ancestors” (p. 176). Rangatira were bound to their *tūpuna* and to their kin groups, through their descent lines, and as such they shared the *hau* of their *tūpuna*. Salmond (1997) continues, “the hau, like the tapu and mana of the ancestors, was at once dispersed throughout the kin group and exemplified in its aristocratic leaders” (p. 176). All members of the *iwi* who descend from Kupe are united under Kupe’s *tapu*, *mana* and *hau*, despite the passage of time.

Māori believe that the space-time divide can be suspended, opening the way for *tūpuna* like Kupe to interact with their descendants in *Te Ao Mārama* (Salmond, 1997). Māori ontology is represented in *whakapapa*, describing a relational world in which all life is connected through *Ngā Atua* (Hoskins, 2001). Through these

whakapapa networks, interpenetration between the invisible realms and the material realm is possible. The boundaries between these realms are in fact thresholds through which exchange can occur (Salmond, 1997). Through the “utilisation of faculties and intelligences of a ‘higher order’, Māori could perceive, access and communicate” with their *tūpuna* across the space-time divide (Hoskins, 2001, p. 11), allowing *tūpuna* to have a presence in the life of the *iwi* and its members (Salmond, 1997).

Wā and identity with the past

Wā* is relative: indicators of *wā* are references to *tūpuna

Whakapapa contain important information about *tūpuna* and the past, and these entries serve as indicators of *wā*. *Whakapapa* is both a record of descent lines from founding *tūpuna*, and a reference to historical events in the life of the *iwi* (Pohatu, personal comment, September 13, 2010). The following narrative provided by Grace (1959) is paraphrased here to demonstrate this point:

Pataatai Horonuku Te Heuheu Tukino IV was an eminent Ngāti Tūwharetoa ariki (paramount chief). His names denote important periods in the history of the Ngāti Tūwharetoa people. Born Pataatai, he was the high-ranking son of the then ariki Mananui Tukino II. Pataatai acquired the name Horonuku (landslide) when his parents were killed, along with other members of the tribe, in a devastating landslide in 1846. When Horonuku succeeded his uncle as the ariki of Ngāti Tūwharetoa in 1862, he assumed the title Te Heuheu Tukino IV. This title not only commemorates his succession to the position of ariki, but also those ariki before him who bore this distinguished title. (pp. 458-459)

These three names stand as *pou* in a timeless universe and point to important events in history for Ngāti Tūwharetoa. Each member of the *iwi* at that time and thereafter was and is able to locate themselves and their personal *whakapapa* and histories in relation to their ancestor Pataatai Horonuku Te Heuheu Tukino IV.

***Wā* is dynamic: there is a continuous dialectic between the past and the present**

The past is an important source of information and identity for *Māori*. *Māori* relied on

the past to apprehend the present and to steer a course into the future. The ease of access to the past facilitates a continuous dialectic between the past and the present, as the past is relived and reinterpreted in the present (Binney, 1987). Soutar (1991) offers the following account to demonstrate this point:

When Mohi described the conflict between Tuwhakairiora and Ngāti Ruanuku, he chose not to see the war itself as the primary event, but to look beyond the war to the deeper issues which brought it to being. This involved a focus on events which had occurred generations before the war. Events which were difficult to separate out and place accurately in chronological order, let alone on a single time line. (pp. 79-80)

To understand the present (and the consequences for the future), Mohi was able to locate the seemingly unrelated past events, laying them out so the conflict could be reviewed in its entirety. In this way, a lasting resolution could be attempted. Past events, stored in the mind are easily retrieved and ordered to show their relationship and relevance to the present.

While events in the past were referred to as indicators of *wā*, the time of an event (in the Western sense) is not fixed but takes its measure from the significance of the event and its relationship to other events (Soutar, 1991). As in all aspects of *Te Ao Māori*, the relationship is key. It is the relationship between events and the people involved that enjoys ontological primacy for *Māori*, not the event itself or the time in which the event occurred (Salmond, 2011; Soutar, 1991). When historical events are retained in the mind, as in Soutar's balloon model, they are easily recalled and examined. According to their meaning and their relationship to other events, the sequence of events can be arranged and re-arranged to fully apprehend a situation or an issue.

Relative, qualitative and dynamic *wā* unlocks the door to the past

When *whakapapa* and the past are stored in the mind, and this is the principal reference to history, time becomes relative, qualitative and dynamic. Take the historical events cited above in relation to Ngāti Tūwharetoa. These momentous occasions – the birth of Pataatai, the landslide, and the succession of Horonuku to

ariki - became important reference points in time. In former times, and even today, if the question was posed ‘when did such and such occur?’ the response might be ‘*i te wā i a Horonuku*’ ‘in the time of Horonuku’ (Soutar, 1991). This does not locate the event chronologically, which would be meaningless to Māori. Instead the time of the event in question is located in relation to another significant event or person, and from there, connections are made. History can be referenced and cross-referenced providing far more detail than dates and numbers. A tapestry of history starts to emerge and, in this way, personal accounts and stories that are important to the identity of the tribe and its members are relived and retained in the mind for future generations.

Nature provided Māori with the inspiration for conceptualising *wā* in relation to the past. *Wā* is relative to *tūpuna* and events in the past and is therefore qualitative and dynamic. Notwithstanding the important role that relative, qualitative and dynamic *wā* play in identity formation with *iwi*, *tūpuna*, and the past, it is cyclical *wā* that provides the key to understanding the relationship Māori have with the past. The following interrelated notions about the past arise out of cyclical *wā*: the past exists in parallel with the present; timeframes entwine the past, including the realms of *Ngā Atua*, the present and the future; and a state of timelessness exists in between defined events.

The past exists in parallel to the present and is retained in the minds of Māori, and so the past is not remote but is ever accessible. Timeframes entwine the past, the present and the future and so Māori identity is constituted in relation to *iwi*, prominent *tūpuna* and important events in the history of the *iwi*. *Tūpuna* and events in history are indicators of *wā* and also references to knowledge, history, cultural practices, language and kinship ties, all of which are important in the formation of Māori identity. Because a state of timelessness exists in between important events, the past, which exists in parallel with the present, is easily called into the present. The ease of access to the past, and the ability to order events as the occasion demands, facilitates a continuous dialectic between the past and the present. The way is open to constructing a view of the past that is rich with meaning and possibilities for Māori and Māori identity in the present.

Distinctive Māori approaches to time

At the beginning of this chapter I stated that Māori identity is constituted in relation to place and kin networks. I went on to show the connection between Māori notions of time and the formation of Māori identity. Through this exploration of time and identity formation, it is now possible to draw further conclusions about distinctive Māori approaches to time in *Te Ao Mārama*.

Wā exists in relation to a defined event or wā doesn't exist at all

Wā exists within a defined context, and is dedicated to, and defined by, the purpose of that context. Outside of that context or those parameters, *wā* does not exist (the notion of timelessness). Essentially, nature provided Māori with the framework for conceptualising *wā*. *Wā* is relative to nature's cycles and nature gave form or substance to *wā*. In keeping with this model, Māori also gave substance to *wā*, in the form of priorities. For example, procuring food was a priority and gave pattern to *wā*. While the conditions occurring in nature were favourable, the activity continued, but when the conditions were no longer favourable, the activity ceased, *wā* ceased. *Tūpuna* and events in history were important sources of information and identity and gave substance to *wā*. When *wā* doesn't have substance, *wā* does not exist. As Metge (1976) would say, *wā* stops and starts.

Māori have a personal relationship with wā

Wā is relative to nature's cycles, prominent *tūpuna* and events in history. *Wā* is relative to nature as it occurred in the *rohe* inhabited by each *hapū*. As a result, each *hapū* formed a personal relationship with *wā*, living their lives in concert with nature's cycles as they transpired in their *rohe*. *Wā* is also relative to people, in particular *tūpuna* and important events in history. Reference to *tūpuna* and events in history, as indicators of *wā*, means that *wā* is not only specific to each *hapū* and *iwi*, but also to each *whānau*. Traditionally *wā* was experienced and understood by *whānau*, *hapū* and *iwi* within a personal and relevant context.

Māori invest in wā

Wā is given to those principles or practices that are of value to Māori. Horticulture and food gathering were a priority to Māori, as was maintaining a relationship with

the land. Māori preserved the *mauri* of the land and the natural environment by observing the appropriate *wā* for taking food. In so doing, Māori lived in accord with their natural environment and were co-creators in life. Survival was also dependent on keeping social relations strong because Māori were necessarily a communal society. Well-being was, and continues to be, derived from belonging to and participating in community affairs. The expression *kanohi ki te kanohi*, or face-to-face, conveys the importance of active participation in community affairs. Whether the focus was on the land or people, the emphasis was, and still is, on *whakawhanaungatanga*. Preserving a relationship with the land and kin groups was not only a priority for day-to-day survival but, more importantly, for the holistic well-being of the communities and the environments in which Māori lived.

Māori engage with *wā*

Māori are interested in the qualities associated with *wā* and these qualities, conveyed in the expressions used by Māori to denote *wā*, are a feature of *wā* and give form to *wā*. *Wā* is associated with certain conditions occurring in nature. For example, the appearance of *Matariki* signalled the beginning of a new cycle of planting and harvesting. Māori looked, and waited, for *Matariki* to appear and made predictions about the coming season based on their observation of the stars. This was the *wā* for thanksgiving and celebration, but also the *wā* for reflecting on past seasons and preparing for the season to come. The appearance of *Matariki* initiates the *wā* for celebration, reflection and planning for the upcoming horticultural season, and so gives structure, meaning and value to *wā*. Māori engage with *wā* by observing and acknowledging the characteristic signs in nature and responding accordingly.

Māori also engage with *wā* through their *tūpuna* and events in history. Great emphasis was placed on *tūpuna* and the past, for Māori derived meaning from their *tūpuna* and the past as a guide for the present and the future. Māori are interested in the details contained in their histories and the characteristics of their *tūpuna*. By valuing these details and characteristics, Māori activate and create connections (exchanges) with their *tūpuna* and their histories, thus giving meaning and substance to *wā*. Māori engage with *wā*, by valuing and making connections to their *tūpuna* and the past through those qualities and details that are perceived, interpreted and experienced in and through *wā*.

***Wā* is not fixed and so life is understood as fluid and contingent**

Wā is not fixed but is relative to nature and dynamic, and so life is understood as fluid and contingent rather than predictable. Horticulture and food gathering were a priority for survival and Māori were ready to respond as and when the conditions were auspicious. Social commitments were also a priority and similarly required a level of responsiveness and adaptability. Flexibility was a necessity and Māori were habituated into a disposition that made them ready to accommodate and respond to others, or opportunities as they arose. *Wā* is dynamic and Māori managed their lives to allow for its contingent nature.

Wā is not fixed and Māori were adept at perceiving the indicators of *wā* as they occurred in nature. Procuring food was a constant necessity, as was maintaining a relationship with the land. Māori looked for, and anticipated, the signs that indicated the most appropriate *wā* for gathering or cultivating food. Observation and listening skills were highly valued and became highly developed. Māori learned to observe, to read, to hear and to interpret nature's signals and were attuned to natural rhythms, their own rhythms, as well as those of their natural surroundings. Māori developed awareness and sensitivity toward the subtle nuances or messages conveyed in nature and natural phenomena.

***Tūpuna* and the past are significant in the lives of Māori**

Wā is cyclical and the basis from which Māori derive their understanding of the past. The past exists in parallel with the present and so timeframes interlink the past with the present and the future. The life and identity of an individual is constituted within the context of the *iwi*. *Iwi* are associated with prominent *tūpuna*, and these *tūpuna* and the past are significant in the lives of Māori. In a universe that is perceived to be timeless, *tūpuna* and important historical events act as indicators of *wā* and signposts, which inform the present and the future. *Tūpuna* and important historical events are not confined to the past, but are retained in the minds of Māori and, as such, exist in the present and are accessible, as required. When Māori recall *tūpuna* or past events, it is as though the passage of time does not exist (the notion of timelessness). *Tūpuna* and the past, which give meaning and context to the present, can be called into the present and experienced in a very personal way.

Looking at time as it was experienced in traditional Māori life has allowed us to consolidate our understanding of Māori notions of time or *wā* and draw some conclusions about distinctive Māori approaches to time. In traditional times *wā* was integral to living as Māori and through *wā* Māori formed a secure sense of their identity in relation to place and kin networks.

Wā and 'Māori enjoying and achieving education success as Māori'

The Ministry of Education (2009) states that schools play a vital role in supporting Māori learners to achieve education success and maintain and enhance their identity as Māori. What educational opportunities then, can schools provide Māori learners that endorse Māori identity, *te reo Māori* and *tikanga Māori*?

Schools are not obliged to teach *te reo Māori*, and even if there is a willingness to teach *te reo Māori*, in my experience as a facilitator providing *te reo Māori* professional development to schools, there is a lack of teachers who are proficient in *te reo Māori* and can teach *te reo Māori*. There is also a lack of teachers who have knowledge of *tikanga* and can support schools to integrate *tikanga Māori* into school practices. The issues surrounding teaching and integrating *te reo Māori* and *tikanga Māori* notwithstanding, these are both essential to Māori identity, and it is important for schools to address these issues.

But are *te reo Māori* and *tikanga Māori* sufficient to developing a secure identity as Māori? This chapter has highlighted that *wā* is essential to living as Māori. Māori continue to identify with place and their extended family networks and so if Māori learners are to succeed as Māori, they need opportunities to learn about, experience and practise *wā*.

What opportunities are there for Māori learners to learn about the past, as understood by Maori? For example, timeframes entwine the past, the present and the future. Māori are not disconnected from their past, but are located in their past and in relation to the future. Māori learners gain an understanding of their own identity in relation to

their *whānau*, *hapū* and *iwi*, by knowing about their *tūpuna* and associated histories. Understanding and experiencing *wā* in relation to the past is important to identity formation.

What opportunities are there for Māori learners to learn in contexts that reflect cyclical, relative, qualitative and dynamic *wā*? *Wā* is relative to nature's cycles and Māori developed a unity with their natural habitat through their experience of nature's cycles. Māori dedicated themselves to understanding and following the protocols of the land, and made connections to, and interacted with, the land on a daily basis, through their observance of *wā*. Understanding and experiencing *wā* as it relates to the natural world is also important to identity formation.

Conclusion

Wā is integral to living as Māori and is instrumental in Māori identity formation. *Wā* therefore needs to be a consideration if Māori learners are to succeed as Māori.

The next chapter will focus on time in New Zealand schools and examine the relationship between time and Western identity formation.

Chapter four: Western notions of time and education

Introduction

Situating the Work

The purpose of the previous chapter was to demonstrate the fundamental relationship between *wā* (Māori notions of time) and the formation of Māori identity. Essentially, Māori identity or personhood is formed from an understanding of a social self primarily constituted in relationship, before birth, with place and kin. Chapter three established that there is an explicit connection between *wā* and the intimate association Māori have with their ancestral lands and kin networks. *Wā* is instrumental and therefore critical in the formation of Māori identity.

Time and identity are again the subject of this chapter as we continue to explore the possibilities for Māori learners achieving education success ‘as Māori’ in New Zealand schools, which are structured on Western ideals, including Western notions of time. If *wā* (Māori notions of time) is explicitly linked to Māori identity formation, we can assume that Western time is similarly linked to Western identity formation. In this chapter I argue that time in New Zealand schools – particularly English medium schools – reflects, and serves to foster, Western identity formation, and is instrumental in reconstituting and relocating Māori within Western frameworks of meaning. Time in schools thereby limits meaningful opportunities for Māori to learn about their cultural identity.

This chapter will look at the historical influences on time in New Zealand schools, to demonstrate how time (naturally) operates to endorse Western cultural identity formation over Māori cultural identity formation. The first section will explore the sources of Western time in New Zealand schools in order to achieve the following: to gain an understanding of Western notions of time; to provide a point of comparison with Māori notions of time (to be taken up in chapter five); and to show the ideologies that have shaped Western time. These ideologies are inherent in Western time and, I maintain, are transmitted through the expression and practice of time in New Zealand schools. The second section will look at the structure and uses of time in New Zealand schools and demonstrate how time functions to promote and nurture the

beliefs and values inherent in Western society. The second section of this chapter will allow us to consider the actual and authentic possibilities for Māori learning about their cultural identity.

This chapter will be guided by the following two questions: What are the historical influences that have shaped Western time? How do Western notions of time function in New Zealand schools to reflect and nurture Western beliefs and values and therefore Western identity formation? These questions will form the overall framework of this chapter.

The historical influences that have shaped time

Time is a socio-historic construct (Adam, 1995; Frank, 2011; Harvey, 1990) and the time that is experienced and practised in New Zealand schools has its origins deep within Western history. New Zealand schools are characterised by clock time and temporal rule-frames that regulate school life and learning. Clock time, which is a feature of the Western world, is only possible because time has been conceived and constructed in a particular way; that is to say, as abstract, standardised, linear, and quantitative (Adam, 1995). While these concepts of time are considered to be relatively recent, the nature of time has been debated by philosophers, scientists and theologians throughout history (Frank, 2011). The purpose of this section is to trace the development of Western time, which has come to represent time in New Zealand schools. How did abstract, standardised, quantified, linear time come about and what ideals and values are associated with these particular beliefs about time?

Nature's rhythms versus abstract time

Mythological beginnings

In contrast to the mechanical regimens of clock time in modern schools, ancient beliefs of all peoples about time were founded upon nature's rhythms that are the basis of humankind's implicit understanding of time (Adam, 2004). In Western traditions of thought, engagement with time can be traced back to the Stone Age in Europe, and mythologies from this period indicate that time was relative to nature. The sun, the moon and the stars – portrayed in cosmic mythologies about Sky Gods –

were the source of time for hunter-gatherer societies (Frank, 2011). As humans started to occupy permanent settlements and farm the land, the Earth became the focus, generating new mythologies about Mother Earth. The commencement of the agrarian year, the seasons, and the phases of the moon consequently became the main indicators of time. It is from this physical encounter with time that nature's rhythms became deeply embedded in the physiology of humankind (Adam, 2004); and it is this intuitive orientation to time that is in tension with the abstracted, standardised, quantified, linear time of schools.

The abstraction of time from nature

The abstraction of time as something separate from nature, an idea essential to the advent of clock time in schools, has been traced to the development of writing and standardised units of measurement. These two developments occurred during the emergence of cities and the associated growth in trade. Writing had its beginnings around 4,000 BCE in the cities of Sumer (now known as Southern Iraq) through a system of clay tokens that “were used to represent ... a day's work or a basket of wheat” (Frank, 2011, p. 30). Sets of tokens were packaged and impressions made on the wrappers to indicate the number of tokens enclosed. The tokens eventually became redundant and the markings alone came to represent a measure of a worker's time spent on a task. Time as number had exchange value and could be traded as a commodity. By recording labour time externally, through a system of markings or writing, human kind had begun to conceptualise time as a separate property of the natural world and to conceive of time as number.

As with writing, standardised units of measure came about in response to the expansion of commerce. A standard was necessary for measuring the weight of goods being traded. In order to develop a standardised measurement, physical objects had to be abstracted. The weight that was experienced was transformed into the “weight that could be conceptualized” (Frank, 2011, p. 31). These developments – the abstraction of weight and standardised measurement – represented important cognitive innovations for humankind. The same thought processes that enabled humans to create a standardised system of measurement and conceptualise weight as a number, would eventually be extended to time.

Calendars and clocks – standardised, abstract time

The Julian calendar, the predecessor to the Gregorian or Western calendar, around which the school year is structured, was established during the time of the Roman Empire. In 46 BCE Julius Caesar initiated wide-ranging temporal reforms and the Julian calendar became the standard (Frank, 2011). Although accurate calendars based on the agrarian year pre-dated the Julian calendar, the Julian calendar was based on the solar cycle rather than the lunar cycles. The effect of a standardised calendar, however, was to remove cosmic time from its natural context, re-instating it in written form.

There was little advancement in Western timekeeping between the advent of the Julian calendar in 46 BCE and the mechanical clock in the 14th century, which would come to regulate daily life and learning in schools (Frank, 2011). In European cities, prior to the clock, bells regulated activity, for example, “a bell signal for the markets, a bell signal for the guilds” (Frank, 2011, p. 72). Over time, and with the expansion of cities, the bell system became inadequate. In 1370, a well-constructed mechanical clock was installed in Paris (Mumford, 1935). By 1393, church clocks and public clocks had been installed in many European cities and large market towns (Frank, 2011; Thompson, 1967). With the clock came the hour, twelve for the day and twelve for the night. The minute, however, would not appear until the seventeenth century (Harvey, 1990). Bells, which initially signalled the hour, were eventually replaced by the clock dial and hand (Mumford, 1935). Time in cities became standardised and life became regulated by the clock and the hour.

The invention of the mechanical clock changed people’s conception of time and the way people engaged with time. The clock brought two cognitive innovations into play: the representation of time as a number (an abstraction of time as something external to nature) and the standardised measurement of time. Abstract, standardised, measured time had become a daily reality in cities. People began to arrange their lives in relation to the clock; time could be fixed and meetings, events and work times scheduled against the hour. As Mumford (1935) noted, abstract or clock time had become “the new medium of existence” (p. 17). On this smaller scale, the stage was set for the clock and synchronised time to come into prominence, precipitated by the European Industrial Revolution.

The following trends and ideologies inherent in calendar and clock time, over time, increasingly characterised Western society: the standardised calendar and clock replaced local calendars and time, and regulated people's time; time became quantified, and as such, fixed and measured; and quantitative time became more important than qualitative time.

These trends and ideologies became manifest in New Zealand schools in the following ways: time in schools became associated with, and regulated, by number (clock time). The time that is uniquely inherent in each learner was replaced by a regulated timetable - all learners came to be expected to conform to a standardised time frame; time, which is inherently associated with creation, was used to re-define reality based on clock and calendar time; and time lost its organic, creative value

Greek philosophers and quantified time

Before we get to schools, and even before we proceed to the Industrial Revolution, let us return to the period of the Greek philosophers Pythagoras, Plato and Aristotle, to a source of some of the fundamental tenets upon which Western time, and therefore time in schools, is based (McGinnis, 2003). Notwithstanding that my reference to Pythagoras is brief, Pythagoras made a significant contribution to the time we live in the Western world, in that he argued “[t]he structure of the world must be understood through numbers” (King, 2004, p.15). This mathematical influence on both Plato and Plato's student Aristotle can be seen in their theories on time and number (Farndell, 2010; von Leyden, 1964). While Plato and Aristotle lived around 400 BCE, the theories they advanced about time – time and number are associated with order; time is a type of motion or an ‘unfolding of being’; time is linear; time can be measured; and time can be divided into equal spatial units – are evident in the time structures that operate in schools (including New Zealand schools) today.

Time and number are associated with order

Plato advanced the notion, adopted by Western society and evident in schools, that time and number are associated with the creation of order (von Leyden, 1964). Influenced by Pythagoras' belief that the world could be explained mathematically, Plato was the first of the Greek philosophers to define time in terms of number

(Farndell, 2010; von Leyden, 1964). Plato believed that time came into existence when the heavens were ordered and, as a consequence the natural world came into being (von Leyden, 1964). The heavens, Plato insisted, “revolve according to number”, and so implicit in his idea of time is a ‘standard of measurement’ or number (von Leyden, 1964, p. 39). The standard measurement Plato referred to was the motion of the sun and the moon, against which time, Plato argued, could be measured, and in relation to which all life is staged (McGinnis, 2003). When the sun and the moon were set upon their orbits, “all natural processes ... [were] assigned a time”, their coming into being and subsequent passing away orchestrated by the ever-repeating cycles of the sun and the moon (McGinnis, 2003, p. 87). Thus time became inherently connected to number, and brought order to the natural world or the world of ‘becoming’.

Plato’s notions of time and the inherent trends and ideologies gradually gained prominence in Western society. Time became associated with: creating order, with value being placed on order, control and discipline; the process of ‘coming into being’, with importance being placed on progress and continual growth, and the need to constantly strive to do better; a standard measurement, which can be measured numerically or quantified.

These ideologies became manifest in New Zealand schools in the following ways: precise timetables and structured daily routines are used to impose order and control over learners and teachers in schools. Punctuality and keeping to time are the rule; the abstract framework of timetables has become the point of reference for learning. Teachers and learners have become timekeepers as opposed to co-creators in the process of learning. Learners are servants to time in their learning as opposed to exploring the possibilities for creating their own personal realities over and through time; learners are under pressure to ‘achieve their potential’ through learning; progress is assessed/ measured against a predetermined standard over time. Progress is not considered valid if it cannot be measured numerically (scientifically). Intelligence, knowledge and learning are assessed against a (Western) standard.

Time is linear and can be divided into quantifiable units of time

Aristotle provided us with linear time, the source of the timetable and the means for establishing order in schools. Aristotle did not share Plato's belief that time came into existence when God created the natural world. Instead, Aristotle asserted that time had always existed and, as such, time has an underlying "continuous, linear structure, with neither a beginning nor an end" (White, 1989, p. 207). Nor did Aristotle believe that time was a type of motion, but determined through observation, that time was a measure of motion, for example, the measure of the movement of the sun across the sky. Accordingly, Aristotle imagined time to be like a line and that 'a time' could be defined by a prior 'now' and a posterior 'now' (McGinnis, 2003). Time, concluded Aristotle, was linear and could be divided into quantifiable spatial units, which were "temporally repeatable", for example, a period of thirty minutes or an hour (White, p. 208). We know that 'a time' has elapsed, Aristotle argued, when there is a definite 'before' and 'after', and change has occurred (McGinnis, 2003).

The following is a summary of Aristotle's notions of time and the associated trends and ideologies that increasingly gained prominence in Western society. Time is linear (unidirectional and continuous). The past, the present and the future proceed in a straight line, flowing one into the other, however the past, the present and the future are viewed as distinct entities; time can be divided into equal spatial units - time is discontinuous. Linear time cuts across natural cycles (it is a time of abrupt interruptions) and therefore time divided as, for example, timetables can be used as a (artificial) mechanism of control; time is made up of divisible 'nows'. Time expands creating the potential for ever greater uses of time. Importance is placed on maximizing time and not 'wasting time'.

These ideologies manifest in New Zealand schools in the following ways. Learning follows predetermined stages of linear development as opposed to unfolding organically. Sequential learning provides a measured 'before' and 'after' with the expectation that change, in the form of 'achieving one's potential' will occur; straight-line logic and reason is highly valued; rigid time structures, invested with power control learners' movements and actions, and what they learn in schools - the more time is broken down the more learners can be regulated; learning is compartmentalised to accommodate fixed timetables. Learning is disconnected from its learning context - learning has become fragmented and piecemeal. Timetables

create routines but not rhythms; and, there is an emphasis on the 'now' and to some extent the future but the past is less important; learners are under pressure to 'maximise their use of time' and not 'waste time' in relation to 'achieving their potential'.

Aristotle and Plato had differing views on time, but both have greatly influenced the way time is understood in the Western world, and indeed, the way time is structured in New Zealand schools. Plato argued that time came into being when God created the world and that both time and number are associated with order and the process of 'coming into being'. Aristotle gave us the notion of quantified, linear time with its possibilities for dividing time, by which means order could be established. These notions of time would resonate far into the future, manifesting in the monasteries of Christianity, underpinning the Protestant reformation, fuelling the Industrial Revolution, and coordinating the public school system – all with the same motivation, namely, power and order.

I will continue with the ideas put forward by Aristotle and Plato about time as I proceed to the period associated with the rise of Christianity (the Dark Ages or the Middle Ages) when St Thomas Aquinas took up the teachings of these philosophers and integrated them with Catholic principles (Fanfani, 1935; von Leyden, 1964). Aristotle's and Plato's notions of time can clearly be seen in the way time was structured in monasteries.

Monasteries and time: Daily structured routines

The time that is lived and practised today in the Western world and in New Zealand schools was born in the monasteries of the Dark Ages. The Christian church took a hostile stance toward the natural philosophy of the Greek philosophers (Frank, 2011), insisting instead that the universe, and hence time, was brought into existence by an act of God who created order out of primitive matter. The Church held the view that "God's nature is to impart order constantly, while the nature of matter is to be ordered ..." (Farndell, 2010, p. 22). Consistent with this view was the belief that the ultimate end of human kind - ever seeking "the realisation of an "ought to be"" was "eternal happiness" (Fanfani, 1935, p.121). Monasteries, some 40,000 during the Benedictine

rule, were dedicated to the attainment of salvation through work and prayer (Mumford, 1935). To this end, monasteries were models of order and discipline, and time was the instrument that instituted order.

The prototype for the daily structured timetables of schools, the Canonical hours, was the means for achieving order and discipline in monasteries. Strict daily routines or timed sequences were the rule in monasteries, the purpose of which was to instill discipline through regular habits of work and prayer (Mumford, 1935). Set times were established for prayer and these were known as the Canonical hours. Bells were introduced in the seventh century, calling the monks to prayer seven times in the course of the day (Mumford, 1935). A new approach to time was emerging. Monasteries provided the model upon which human enterprise – whether worship, industry or learning – could be regulated and coordinated by the collective beat and rhythm of the hours.

The following is a summary of Christian theories about time and the inherent ideologies that would greatly influence the developing Western society. God is the author of the universe and therefore time, leading to the complete authority of God and the movement away from natural philosophy and nature. Importance was increasingly placed on order and power; Western man has dominion over nature - God has placed the natural world at the disposal of Western man in the pursuit of redemption. This belief propelled Western man in a continual quest for progress and mastery over nature and natural impulses.

These ideologies manifest in New Zealand schools in the following ways: learners learn about authority and power; learners are taught discipline; Western knowledge and belief systems are highly valued - indigenous belief systems and knowledges have less value, but where there is value, these knowledges are also at the disposal of Western man; Indigenous notions of time are eroded and replaced by Western notions of time; and, learners' innate sense of time – when to eat, rest, play and learn - are replaced with fixed routines and rigid timetables.

The protestant movement and time

The Western obsession with work and not wasting time – endorsed in New Zealand schools – can be traced to the asceticism of the Protestant tradition. The Protestant movement, instigated in the early sixteenth century, took the Catholic ideals of asceticism and religious devotion out of the monastery and into daily life, in the belief that salvation could only be gained by committing oneself and one's time to hard work (Weber, 1958). The Puritan doctrine of pre-destination (that some were saved and others damned, and that the choice was pre-determined by God) intensified the need to prove oneself through hard work (Riesebrodt, 2005). This conviction is highlighted by Reverend Heywood, 1690 (as cited in Thompson, 1967), as follows:

Time lasts not, but floats away apace; but what is everlasting depends upon it
... The great weight of eternity hangs on the small and brittle thread of life ...
our working day, our market time ... O Sirs, sleep now, and awake in hell ...".
(p. 87)

The concept of work as a moral end in itself, 'a calling' emerged as a consequence of the Protestant tradition (Riesebrodt, 2005; Weber, 1958).

The modern capitalist spirit, which would in due course influence the organisation of time and learning in New Zealand schools, was borne out of the concept of work as 'a calling' (Weber, 1958). Modern capitalism, the pursuit of wealth for wealth's sake, can be attributed to the Puritan belief that a life dedicated to hard work, frugality and self-discipline were proof of one's religious devotion (Weber, 1958). The accumulation of wealth was evidence of success and that one was surely 'chosen' by God (Riesebrodt, 2005). The Puritan tradition, which provided the model for modern capitalism, also provided the model of a disciplined labour force (Riesebrodt, 2005). The expansion of industrialism in the West would bring about the need to replicate such a disciplined labour force.

These Protestant beliefs about time and the inherent ideologies gained prominence in Western society: time is a limited resource (finite) and, time must be used productively - work is the priority; those who work hard work are to be admired;

success comes to those who work hard and those who accumulate wealth will be elevated in society.

The following messages became constantly conveyed through education: time must not be wasted; work must be prioritised over leisure; success is linked to hard work; order and self-discipline are keys to success; education is the means for gaining employment; education will bring about social change; and, education is critical to one's future success.

Newton, industrialism and the rationalisation of time

Newton was responsible for the theory of absolute time, which confirmed for the West that time was something separate from nature, an idea that lends itself to the mechanical time structures of schools. Unlike Aristotle, who believed that time is relative to changes in matter, Newton theorised that time has a distinct reality, independent of space and matter (Frank, 2011). As an absolute, separate from the universe, time's flow, according to Newton, is uniform and invariant, the same everywhere in the universe (Frank, 2011). In essence, Newton's conception of time was the same as Aristotle's, that time has an underlying, continuous, linear structure. Like Aristotle, Newton was interested in time's operational value, how time works and the uses of time (Adam, 2004). In effect, Newton brought Aristotle's notions of time, namely: time is invariant; time is linear; time can be measured; and time can be divided into spatial units of time, into the nineteenth century (Adam, 2004), just as the European Industrial Revolution was about to materialise.

The following ideologies fundamental to Newton's absolute time increasingly characterized Western society: time is absolute - there is one true time, Western time; time is invariant and uniform - time is not relative to space or matter, time is the same everywhere in the universe; and, time proceeds unabated.

These Newtonian trends and ideologies are manifest in New Zealand schools in the following ways: learners experience Western notions of time to the exclusion of all

others; learners are made to feel the urgency of time and the need to maximise opportunities – ‘time and tide wait for no man’.

The European Industrial Revolution, which began in the early nineteenth century, was the catalyst that cemented clock time in the Western world (Lefebvre & Regulier, 2003). The Industrial Revolution was the natural confluence for the theories and developments about time examined thus far: Newton’s absolute time; Plato’s theory on time, number and establishing order; Aristotle’s linear, quantified, divisible time; the desire for power and order, and the regimented routines of the monasteries; the Protestant obsession with time and work; the development of the standardised calendar and the mechanical clock; the hour and the minute. All these theories converge at this historical meeting point and the outcome is rationalised time or clock time. The Industrial Revolution would forge an entirely new system of time, the likes of which, hitherto, had not been seen or experienced. Clock time would have far reaching consequences economically and socially for Western man and, in fact, for all humankind (Lefebvre & Regulier, 2003).

The time of the English peasantry or village community is best described by the notion ‘task-orientation’. In spite of the diffusion of timepieces from the fourteenth century onwards, life in the English village had undergone little change prior to the Industrial Revolution (Trevelyan, 1936). The working day of the English labourer, whether engaged in subsistence farming or cottage industries, was organised around tasks and the requirements for completing those tasks (Thompson, 1967). The completion of tasks was time-variant as other factors came into play, like the weather or the availability of materials. Work life alternated between periods of intense labour and inactivity, and there was little distinction between social life and work life. The workday of the English labourer was attuned to natural work rhythms – those of the task, the individual, the community and the natural environment. The workday had not yet been re-structured by clock time.

For all the efficiency of the new machines, made possible by Newton’s mechanics, it was the ubiquitous clock that powered the industrial engine, the factory system, and transformed the human experience of time irrevocably (Mumford, 1935). Large-scale manufacturing and farming forced the English labourer to seek employment in

factories (Trevelyan, 1936). The transition was difficult, as task-orientation became the timed labour of the factory workshop (Thompson, 1967). The drive to maximise efficiency and standardise production generated two innovations: the production line, which disrupted the natural rhythm of task completion; and time discipline. Under these new regimes, the task no longer regulated time; the clock did and the clock exacted regularity. Time was money and time sheets (exact to the minute), time-keepers, informers and fines ensured that time was not wasted (Thompson, 1967). The new labour habits and time discipline of factories would soon extend into every aspect of life; and schooling, which would be modelled on the factory system, would be singled out to prepare children for employment in the factories (Harvey, 1990; Lefebvre & Regulier, 2003; Thompson, 1967).

The following trends and ideologies fundamental to clock time - abstract, linear, standardised, quantified time - would increasingly characterize Western society: time can be used to synchronize activity - the workday became regulated and fixed; time has exchange value – the employer must ‘use’ the time of his labourer and ensure it is not wasted. Emphasis came to be placed on time, not the task or people; and, time came to regulate the completion of the task, not the task itself - routines are imposed as opposed to natural rhythms.

These trends and ideologies became manifest in New Zealand schools in the following ways: all learners and their learning conform to a standardised, regulated time frame - the time that is uniquely inherent within every individual is replaced by a regulated timetable; the teacher must ‘use’ the time of the learner and ensure it is not wasted - time is used to impose order and control over learners and learning. The emphasis is on time (including age and standardised developmental stages), not learning or the needs of the learner; and time, which is inherently associated with creation, is used to re-define reality based on clock and calendar time.

Conclusion

We began this chapter by studying the historical influences that have shaped Western time. As a result of this study we can now draw some conclusions about Western notions of time and the ideologies (beliefs and values) that have shaped, and are inherent in, Western time – and Western schooling.

Western time is:

- absolute, invariant and uniform. There is only one time, namely, Western time. Time proceeds unabated. Time is associated with the pressure that time is passing and time is being lost;
- abstract. Time is abstracted from nature. Time is associated with the standardised calendar and clock, and regulates people's lives. Local times (an innate sense of time) and natural rhythms have diminished value. Time is not relative in any personal sense;
- quantitative. Time is number; time is not associated with nature. Time can be measured numerically or quantified and, as such, time can be fixed. Quantitative time is dominant, to the exclusion of qualitative time; and
- linear. Time is unidirectional and continuous and, as such, time can be divided into equal spatial units, for example, timetables. Time then becomes discontinuous and finite – a time of abrupt interruptions that can be used as a (artificial) mechanism of control. Time is made up of divisible 'nows', creating the illusion that time can expand and that there is the potential for ever increasing uses of time. Time is associated with the pressure to conform and to do more in a limited period of time.

Christianity and Protestantism have also shaped Western time:

- God is the author of time. Western man has dominion over nature. Nature and natural impulses can be controlled; for example time can be controlled, and time can be used to regulate activity and people. Time is associated with order, control and discipline. Time is associated with progress and continual growth.
- The Protestant work ethic is such that time is a limited resource (finite) and must not be wasted. Time must be used productively; work is the priority. Time is associated with the pressure to work hard and to succeed.

Time in our everyday lives is, for the most part, taken for granted. We never really stop to think about time or, more particularly, about the ideologies that have shaped time, and permeate our experience of time. And yet Western time, as has been shown above, is not just time per se; Western time is weighed down and weighted with the

values, principles, and beliefs that are so much the essence of Western society and culture. This next section will show how Western ideologies are conveyed through time as it is practised in New Zealand school, thereby supporting the development of Western cultural identity over Māori cultural identity.

Time and Western identity formation in New Zealand schools

It is in the manner time is expressed or functions that Western ideologies are conveyed (Adam, 1995). This is never more evident than in New Zealand schools. The expression (structure and uses) of time in New Zealand schools will constitute the second section of this chapter. I argue that time functions to promote and nurture Western ideologies, and therefore Western identity formation, and at the same time, works against Māori learners developing and retaining their own sense of cultural identity. How then is time structured and used in New Zealand schools, and how do these structures and uses promote Western ideologies and therefore, Western identity formation? We begin by looking at the origins of the British education system, which was the model for time in the New Zealand education system.

Time and the British education system

The purpose of the British education system, established during the time of the Industrial Revolution, was not just about education. The purpose was to instil discipline and habituate young children into the long hours and the time disciplines of the factories (Harvey, 1990; Lefebvre & Regulier, 2003; Thompson, 1967). Musgrave (1969) states that the goals of the British education system were linked to religion and industrialism and included: the control of people's minds; preparing the working classes for employment; and egalitarianism (although the system that transpired was tiered). The purpose of schooling, therefore, was to prepare working-class children for employment by habituating them into the long hours and time disciplines of the factories. Time was *the* target and *the* mechanism for replacing the innate time habits of working-class children with the time disciplines of the factories.

The time disciplines of the factory were based on the abstract, linear, measured time of the mechanical clock with its hour and minute. As noted in the previous section,

the European Industrial Revolution was the catalyst that cemented clock time in the Western world (Lefebvre & Regulier, 2003). Add to clock time the Protestant work ethic and obsession with time, plus the desire for control and discipline of Christianity, and the outcome was the time structures and disciplines of the factory. Abstract, linear, measured time generated the rigid timetables that regulated the factory workday and workers, for example, when to start and stop work, what tasks to do and when, and the speed at which tasks were to be completed. These time disciplines, underlying beliefs and drivers were emulated in British schools and subsequently New Zealand schools, in order to habituate young people into the common net of Western time (Harvey, 1990).

Time, control and discipline

The principle function of time in schools is control and discipline. According to Foucault (1991) the purpose of discipline in schools is to diminish the power of the learner, to coerce the learner into a submissive state – a ‘docile’ body – but with increased capacity for acquiring certain knowledge and aptitudes. A ‘docile’ body is achieved by breaking down and replacing the natural rhythms of the learner with the rigid time structures and timetables imposed by schools, that is, Western time (Miller, 2000). The day in, day out assault on the body forces the body to accept these time disciplines (Lefebvre & Regulier, 2003). The body is thus trained to perform in certain ways, and to carry out tasks at certain times. Controlling the body by overcoming its natural rhythms is the key to controlling the mind (Foucault, 1991). In this manner, discipline is achieved and, in the process, Western time (and the ideologies inherent in Western time) is conveyed and becomes embodied by the learner.

What ideologies are conveyed through time in schools?

Time, which is inherently associated with creation, is used to re-create the reality of the learner in line with clock and calendar time. When learners’ innate sense of time is broken down and replaced by the time structures of schools, learners come to believe that there is only one time, Western time, and that time is associated with the standardised calendar and clock.

In schools, Māori notions of time are eroded and replaced by Western notions of time. In the process, the bond Māori have with the land and their *whānau*, *hapū* and *iwi* (kin networks), experienced through a personal relationship with *wā*, are likewise eroded. The value of local times and natural rhythms, an innate sense of time, *whakapapa* and the histories bound up in *whakapapa* is diminished.

Time structures in New Zealand schools

In the next part of this section, I will consider time as it is structured in New Zealand schools – in particular, the timetable and the period. Dividing time into smaller units of time, as in the timetable and the period, is a mechanism utilised by schools for imposing control and discipline over learners (Foucault, 1991). The timetable and the period regulate the movements and the activities of the learner, effectively replacing the natural rhythms of the learner with the routines of the school. The timetable and the period are the product of abstract, linear, quantitative time and these notions of time, and the associated ideologies, will be conveyed through the operation of the timetable and the period in New Zealand schools.

The timetable

The timetable is the principle means for organising time and establishing order in schools (Adam, 1995). All movements, learning and activities are synchronised by the timetable. The school day is broken down into strict divisions of time, each of which is measured and timed. The timetable creates fixed points, which direct the movements and the activities of the learner, for example, when the learner must arrive at school, when the learner will learn, when the learner may eat and play, and when the learner may leave school. Learners are made to keep to time and there are repercussions if the learner does not comply without reasonable justification. All involved in schooling are bound into, and regulated by, these timed sequences to ensure conformity to a regular, collective beat.

The period

The more time is broken down, the greater the potential for controlling learners and learning. The school day is divided into periods in which learning takes place. The period, in turn, is broken down into smaller segments of time; for example, entry to

the classroom, settling down, the lesson itself, putting away, and exit. Each of these segments is measured and has rules attached. For example, learners might be expected to line up at the door and wait for permission to enter the classroom. Once the learner has entered the classroom, a starter or 'do now' activity might be assigned for the first ten minutes of the lesson. Breaking time down into ever smaller units of measured time intensifies the use of time and maximises the teacher's control over the learner (Foucault, 1991). Learners become accustomed to the fragmentation of time and learning, and to having their learning time closely supervised.

What ideologies are conveyed through the structure of the timetable and the period?

Learners come to think of time as linear and, as such, time can be divided into smaller units of time, as in a timetable. Learners also come to think of time as quantitative; as such, time is number and can be fixed. Time can be controlled and time can be used as a mechanism to impose control, discipline and order. The more time is broken down, the greater the potential for controlling time, activity and people.

Within New Zealand schools, Māori learners (or any learners, in fact) do not have the opportunity to experience cyclical, relative, qualitative, and dynamic time, nor do Māori learners have access to the knowledge, beliefs and cultural practices associated with these notions of time.

The use of time in New Zealand schools

In the next part of this section, I will look at the way time is utilised in New Zealand schools, in particular, the effects of the timetable and the period, and the Western ideologies conveyed through the uses of time.

Time must not be wasted

The timetable is utilised to prevent idleness and to ensure that learners are meaningfully engaged throughout the school day, implying that time must not be wasted (Foucault, 1991). The teacher experiences, and learners are made to experience, the pressure of not wasting time, particularly when the activity is not

prescribed by the curriculum. On the other hand, linear time, which produced the timetable, is made up of divisible 'nows', creating the notion that time expands and that there is the potential for ever increasing uses of time (Foucault, 1991). Learners are made to feel the pressure of not wasting time, but also of extracting from time, ever more productive uses of time. Learners are under pressure to work quickly and efficiently, and to produce good work within the deadlines specified by the timetable (Adam, 1995). The focus, however, is on time – not the learning or those individuals engaged in teaching and learning. Learning is made to conform to time.

Learning must conform to time

The school curriculum is packaged (Musgrave, 1969). Time, the learner and learning are quantified. Learning in schools is pre-arranged to occur at a certain time in a child's life (according to age), at a specific rate and over a fixed time (Adam, 1995). Learning is broken down into pre-fabricated blocks of learning and arranged into fixed sequences. The order in which skills are learned is pre-determined (Postman & Weingartner, 1969). Similarly, learning is assessed against a pre-determined (Western) standard, and learners are expected to progress at a specified rate and within a specified timeframe. Because of the nature of the prescribed curriculum, and the requirement to conform to time, learning that occurs outside of the prescribed curriculum cannot be recognised for its value, or as valid (Illich, 1971).

The pressure to conform to time forces learning to be scripted. Because learning is prescribed, and sequenced to occur at certain times and within a specified time, not only has the content of the learning been pre-determined, the lesson has also been scripted (Woods, 1986). Teaching does not require an exploration of ideas or an exploration of the learners' prior knowledge or cultural background, but rather delivers pre-digested information. For the teacher, this requires a specific teaching style; and for the learner, an understanding of the conventions of such an approach to teaching (Woods, 1986). Teachers are not merely asking questions, but crafting responses, so that the pre-determined learning takes place within the allocated time. The period is broken down by the teacher to allow maximum control with which to affect a contrived style of learning that leads to a pre-determined outcome.

Learning is made abstract and is fixed through the mechanism of finite time

The timetable compartmentalises learning into finite, measured segments of time; time is abstracted and so too is learning. The daily reality of school life takes its experiential form from compartmentalised learning. Directed by the timetable, the learner will attend a science class, for example, and after a specified period of time, the bell will sound, science will end and the learner will move to the next class. Learning is thus fragmented by time, piecemeal and decontextualised or abstract. The finite length of each period determines what can be taught, and the manner in which instruction can occur. Priorities are set and allocations are made based on these finite, measured divisions of time. Learning activities, such as a *pōwhiri* cannot be contained within the finite, measured timetable, and so, they are unlikely to occur. Learners will have little opportunity to experience learning within a holistic, naturally occurring context.

What ideologies are conveyed through the use of the timetable and the period?

Learning is prescribed by the curriculum, and constrained by the timetable. Through the requirement to adhere to the timetable, learners will come to believe that when time is not being gainfully employed (in learning that is prescribed by the curriculum), time is being wasted.

Time is also associated with progress and growth, and the need to constantly do better. Time is associated with pressure – pressure to conform, to work hard, to perform with greater efficiency and in less time, and to achieve to a pre-determined standard within a specified period of time.

Learning follows pre-determined stages of linear development. Learners come to accept, through the timetable and the period that learners, learning and activity conform to time, as opposed to unfolding organically in a naturally occurring context. Time and learning loses its organic, creative value.

Because the timetable compartmentalises time, learning is also compartmentalised, fragmented and disconnected from its learning context. Time and learning are experienced as a series of abrupt interruptions and so there is no rhythm to time. Instead, time is associated with fixed routines.

Conclusion

The focus of this chapter was to demonstrate that time, as it is practised in New Zealand schools, fosters Western cultural identity formation, and thereby limits (or completely removes) meaningful opportunities for Māori to learn (about) their cultural identity.

The source of time in New Zealand schools is Western time. We began this chapter by examining the historical influences on Western time in order to understand not only Western time itself, but more particularly, the influences that have shaped Western time. This allowed us to draw some conclusions about Western notions of time and the ideologies inherent in Western time, and to understand how time functions in schools.

This raises the question of the viability of Māori learners having opportunities to learn in ways that support Māori identity formation. Just as Western time in New Zealand schools fosters Western identity formation, Māori notions of time (or *wā*), are instrumental and therefore critical in the formation of Māori identity. When Māori learners' innate sense of time is deconstructed and replaced by Western time, the intimate connection Māori learners have to the land, and to their kin networks (*whānau, hapū and iwi*) are also de-constructed. The effect of time in New Zealand schools is, therefore, to reconstitute and relocate Māori within Western frameworks of meaning.

Time, as it operates in New Zealand schools, will be taken up again in the next chapter, but examined in depth, from the perspective of Māori notions of time, traditional Māori educational practices and Māori identity formation.

Chapter five: *Wā and Māori education*

Word list: *hākui* (grandmother/s); *hui* (meeting/s); *kaumātua* (elder/s); *koroua* (grandfather/s); *maara* (cultivated garden/s); *mokopuna* (grandchild/ren); *mōteatea* (song and poetry); *pōwhiri* (formal welcoming ceremony); *pūrākau* (traditional stories); *raranga* (weaving); *rohe* (region); *taonga tuku iho* (knowledge and skills handed down); *tangihanga* (funeral); *tukutuku* (ornamental lattice-work); *tūpuna* (ancestors); *wā* (Māori notions of time); *whaikōrero* (speech making); *whakairo* (carving); *whakapapa* (genealogy); *whakataukī* (proverb/s); *whare wānanga* (house of higher learning).

Introduction

Situating the work

The previous chapter demonstrated that the time structures and uses of time in New Zealand schools reflect and support Western cultural identity formation. Time is a mechanism of control and its purpose, through the daily operation of the timetable, is to instil discipline. In the process, the learner's innate sense of time and natural rhythms are transposed as they adapt to the time disciplines of schools. In this manner, Western time and the ideologies inherent in Western time are conveyed to, and become embodied in, the learner. Western time and the beliefs and values inherent in Western society are reinforced and reproduced.

If New Zealand schools foster the formation of Western cultural identity through time, then what of 'Māori enjoying and achieving education success as Māori' and more particularly, what of Māori cultural identity? I argue that *wā* is instrumental in the formation of Māori identity, and that through *wā* Māori preserve, transmit and create not only knowledge pertinent to Māori identity, but in fact their existence as Māori.

When Māori learners enter New Zealand schools, they are exposed to Western notions of time. In the course of their day-to-day exposure to Western time, Māori learners' understanding of *wā* – gained through being on marae, being on the land, and being in the company of *hākui* and *koroua* – is eroded. Through time, Māori learners are acculturated into Western frameworks of meaning. Time, I therefore contend, is an unacknowledged part of the curriculum and structure of schooling? that is yet to be addressed in terms of the Ministry of

Education's desire, and indeed the desire of Māori, for Māori learners to both succeed academically in New Zealand schools and retain their identity as Māori.

This chapter will look at *wā* in relation to traditional Māori educational practices, in order to understand how Māori identity was formed within these educational practices. Western time determines the 'what', 'when' and 'how' of learning within New Zealand schools. Similarly *wā* determined the 'what', 'when' and 'how' of learning in traditional Māori education. *Wā* was not just about time; it was about the knowledge, pedagogy and cognitive skills within traditional educational practices that contribute to the formation of Māori identity. This chapter will be guided by the following two questions: What is the relationship between *wā*, traditional Māori educational practices and identity formation? What are the implications of time in New Zealand schools for Māori learners and Māori identity formation?

Before we begin, let us revisit time in the British education system, which was the model for time in New Zealand schools. Looking at the ideological and economic purposes of schools from an historical perspective allows us to understand why initiatives designed to support Māori learners to succeed 'as Māori' are so difficult to achieve in New Zealand schools (Apple, 2004).

Time in New Zealand schools – an historic perspective

Time and the unacknowledged curriculum

Time is an unacknowledged part of the curriculum in New Zealand schools. When we look back to the origins of the British education system, we are reminded that one of the purposes of British schools was to prepare working-class children for employment by conditioning them into the long hours and time-disciplines of the factories (Harvey, 1990; Lefebvre & Regulier, 2003; Thompson, 1967). Embedding Western time through strict timetables was, in effect, part of the curriculum. The timetable of British schools was adopted by the New Zealand education system, and assiduously applied to Native Schools, as illustrated in the following quote:

In every Native School there shall be a time table used. This document is to be hung up in a conspicuous position in the school-room, and its directions are to be always strictly followed. Every item of school work shall begin, and end exactly at the time indicated in the time table.

(Simon, Smith, Cram, Hōhepa, McNaughton & Stephenson, 2001, p. 328)

Western education, as in the Native Schools, was sought after by Māori (Jones and Jenkins, 2011), but this education also involved time disciplines that would, over time, displace *wā* and (as a result) the knowledge, pedagogies and cognitive skills so essential to Māori identity formation.

Wā, traditional Māori educational practices and Māori identity

In the introduction to this chapter it was stated that *wā* is integral to identity formation. It was also stated that *wā* determined the ‘what’, ‘when’ and ‘how’ of traditional Māori education. This section will explore the relationship between *wā*, traditional Māori educational practices and identity formation in regard to knowledge, pedagogy and cognitive skills. Let us begin by returning to *wā*, which was the subject of chapters two and three.

Wā

Nature provides the framework for conceptualizing *wā*. *Wā* is cyclical; this is the principal and underlying notion that characterizes *wā*. All other notions of time relate to, and arise out of, cyclical time. Because *wā* is cyclical, *wā* is also relative, qualitative and dynamic. Cyclical *wā* is the key to understanding the relationship Māori have with their past and, in particular, their *tūpuna* and tribal histories. That is, the past exists in parallel with the present; timeframes entwine the past, the present and the future; and timelessness exists in between defined events. *Wā* is relative to nature’s cycles, *tūpuna*, and events in history; these are the indicators of *wā*, in an otherwise timeless universe. Māori identity is constituted in relation to place and kin networks and, as was shown in chapter three, *wā* is integral to identity formation.

Wā, knowledge and identity

The natural environment, the past, *tūpuna* and tribal histories were significant sources of knowledge and identity to Māori, and provided the context in which learning took place. Subsequently education related to these important sources of information and knowledge, which reiterated Māori identity.

Māori had two priorities in terms of education, which nurtured Māori identity formation. The first was knowledge associated with horticultural and food gathering practices, which involved learning about the signs of *wā* as they occurred in nature and the effective and proper use of natural resources (Hemara, 2000). Māori identified with, and developed an

intimate knowledge of, the *rohe* they inhabited through learning about, and observing, *wā* as it occurred in their natural environment. The second priority related to the past as a source of knowledge, which included cultural beliefs and practices, *whakapapa*, and local histories (Caccioppoli & Cullen, 2006). These things defined the unique identity of the tribe. Tribal knowledge was encapsulated in *pūrākau*, *whakataukī*, *whakapapa* and *mōteatea*, and in art forms such as *whakairo*, *raranga* and *tukutuku* (Metge, 1998). *Kaumātua* were the repositories of such knowledge and were revered as a source of tribal knowledge and wisdom (Hemara, 2000).

Wā, pedagogy, cognitive skills and identity

Wā is relative, qualitative and dynamic; so learning was relative, qualitative and dynamic. Learning occurred in context and was not fixed. The education of children took place within the community and occurred as a natural consequence of daily life. The teaching of young children was primarily the domain of *hākui* and *koroua*, who instructed their *mokopuna* about the natural environment, appropriate behaviour, relationships, tribal customs and histories (Metge, 1976). *Hākui* and *koroua* were the connection to the past and had at their disposal a ready knowledge of family relationships, tribal customs and histories, which were passed on to young children as the opportunity arose.

Māori were personally located in *wā* through their connection with the land, *tūpuna* and tribal histories. Learners were likewise located in their learning. Knowledge gained through personal experience was highly valued by Māori (Moon, 2003). Older children were given responsibilities, such as working in the *maara*; they learned by performing tasks (Metge, 1976). Teaching and learning was reciprocal and children were encouraged to inquire, explore, test ideas and solve problems as they arose (Hemara, 2000). As skills and knowledge were mastered, the learner was assigned more difficult tasks. Learning progressed over time, in relation to the innate time or readiness of the learner. Lessons learnt had an immediate benefit to the community and, in this way, young people gained experience and knowledge, while at the same time functioning and contributing as members of the community (Hemara, 2000).

The past was an important source of tribal knowledge and identity, acquired by young people in context and through experience. The past existed in parallel with the present, and was stored in the minds of *kaumātua*. Important sources of tribal knowledge (like *pūrākau*, *whakataukī*, *whakapapa* and *mōteatea*) were easily recalled and transmitted orally, as the occasion required. Great care was taken to preserve and transmit tribal knowledge unchanged (Metge, 1976). Memory, oral skills and aural skills were highly valued. Young people were

encouraged to attend tribal *hui* (such as *pōwhiri*), where cultural beliefs were enacted through ritual (Royal, 2005). Young people not only heard, but also witnessed, visual displays of cultural knowledge – and they physically participated in these enactments. They developed the ability to listen attentively such that, over time, tribal knowledge became committed to memory and cultural practices became embodied in the learner.

Learning tribal knowledge, as with practical skills, progressed as the learner's thinking processes matured (Moon, 2003). The knowledge encapsulated in *whakapapa*, *pūrākau*, *mōteatea*, *whakataukī* and art forms was often conveyed symbolically or through metaphor and, as such, could be complex. The scope and application of knowledge expressed through metaphor, however, was multi-layered and potentially unlimited (Hemara, 2000). Mythologies, which belong to the category of *pūrākau*, are a case in point. While myths were located in the obscure past, they could be adapted and re-interpreted in the present to suit the audience and the occasion (Metge, 1998). Sophisticated symbols and metaphors were thus broken down for young children, and became a familiar framework or foundation for subsequent layers of meaning and the integration of related ideas. In this way, knowledge from the past could be introduced and understood in the present.

The past, the present and the future were entwined through the relationship between the teacher and the learner. *Hākui* and *koroua* took a personal interest in the well-being and daily development of their *mokopuna*. As such, there was a close bond between teacher and learner. The teaching/learning/loving nature of the relationship between *hākui*, *koroua* and *mokopuna* reinforced family relationships and the connection between the past, present and future. The close bond between the teacher and the learner extended to one-on-one tuition, where a young person was tutored by a *kaumātua* in a specific learning area. This relationship might last for a short period of time or an extended period of time. Regardless, the teacher and learner were seen as an interdependent unit in which the knowledge of the past was conveyed to succeeding generations (Caccioppoli & Cullen, 2006).

Conclusion

Wā is integral to identity formation in traditional Māori educational practices. *Wā* is relative to the signs of nature, *tūpuna* and tribal histories. These areas of knowledge were learning priorities in traditional Māori education. Young children learned about *wā* as part of their education, and *wā* was instrumental in teaching/learning methods. *Wā* determined what was learnt, when the learning occurred and how the learning occurred. Through traditional education, Māori learners formed a sense of their identity.

Wā is relative, qualitative and dynamic; so learning was relative, qualitative and dynamic. In the course of their day-to-day experiences, young people developed a sense of their identity with place and kin networks by learning about their natural environment, *tūpuna* and tribal histories. Learning was not fixed and occurred as opportunities arose. For example, young people learned about the *rohe* they inhabited by gathering or cultivating food at the side of their *hākui* and *koroua*. Young people met, and learned about their relations, while in the company of their *hākui* and *koroua*. Young people learned about the past while attending *hui* and listening to *whaikōrero*. Because learning was not fixed, learning took place in the time of the learner.

The relationship between the teacher and learner was critical in traditional Māori educational practices. *Hākui* and *koroua* played an important role in educating *mokopuna*, providing the link between the past, the present and the future. *Hākui* and *koroua* passed on information about the natural environment, family relationships, tribal customs and histories to their *mokopuna*. Because of the close bond between *hākui*, *koroua* and *mokopuna*, the heart and the intuitive senses were engaged in the teaching/learning process, as well as the physical self, the social self and the intellect.

Learning occurred through experience and through participation. Young people were encouraged, for example, to attend and participate in tribal *hui*. In the course of such *hui*, young people learned about relationships and social obligations. Young people learned the art of *whaikōrero* by listening attentively to their elders making speeches. Young people learned by observing, listening to, and imitating their elders. In the process, cultural practices and tribal histories became embodied in the learner. Learning did not only involve receptive skills. Young people were also encouraged to inquire, explore, test ideas and solve problems in the course of their learning experiences.

Time in New Zealand schools and Māori identity

The previous section demonstrated that Māori identity was affirmed on a daily basis through traditional Māori educational practices. It also presented some models of learning in relation to knowledge, pedagogy and cognitive skills that support Māori identity formation. The next section will contrast *wā* and traditional Māori educational practices with time and educational practices in New Zealand schools today – in order to fully appreciate the implications of time, as it operates in New Zealand schools, on Māori learners and Māori identity formation.

The effect of time in New Zealand schools is to acculturate learners into the practices and ideologies of Western time. *Wā* is cyclical and therefore relative, qualitative and dynamic. Learning in traditional Māori settings was relative, qualitative and dynamic. Western time, by contrast, is linear and therefore abstract, quantified and fixed. Learning in New Zealand schools is likewise abstract, quantified and fixed. When Māori learners enter New Zealand schools, they are exposed to Western time on a daily basis and educational practices that foster Western culture. Unless Māori learners have regular opportunities to experience *wā*, their pre-existing experience of *wā* is eroded by Western time. Māori learners with no experience of *wā* do not have opportunities to learn about *wā*, and can only relate to Western time. The loss of *wā* is not just about time; it is about the loss of knowledge, pedagogy and cognitive skills, all of which contribute to Māori identity formation. Time is not only a barrier to Māori identity formation; it is a system of power that works to relocate Māori learners within Western frameworks of meaning.

Time in New Zealand schools works to erode *wā* while, at the same time, relocating Māori learners within Western frameworks of meaning. The first part of the next section will look at the effects of the erosion of *wā* on Māori learners and Māori identity formation.

The erosion of *wā* and the loss of identity

***Wā* and time in New Zealand schools**

Wā is relative. Māori understand *wā* to be relative to the land they inhabit, to prominent *tūpuna* and to events in history; these are important sources of Māori identity. Māori are personally located in *wā* through the land, through their respective *tūpuna* and through associated events in history. Time in New Zealand schools, however, is abstract; so Māori learners do not have the opportunity to learn about *wā* as a feature of nature, or the concept of *wā* in relation to *tūpuna* and events in history. Neither do Māori learners develop a personal relationship with *wā*. Time structures in New Zealand schools convey the ideology that time is homogeneous. Therefore, Māori learners come to believe that time is homogeneous and not relative to place, to people or to events in history.

Wā is qualitative; Māori associate *wā* with the qualities and conditions occurring in nature. These qualities define *wā*, giving *wā* form and character – which has meaning for Māori. Likewise, Māori are interested in the events of the past and the deeds of their *tūpuna*. It is these things that help to define *wā*, giving *wā* substance and meaning that Māori can relate to and engage with. Qualitative *wā* is integral to the relationship Māori have with the land, their

tūpuna and their knowledge of history. Time in New Zealand schools, by contrast, is quantified. Time is associated with, and regulated by, the time of the clock. Māori learners do not experience qualitative *wā* or have access to the knowledge conveyed through qualitative *wā* – both of which are important sources of Māori identity. Instead, Māori learners associate time with the standardized clock and calendar.

***Wā* and the timetable**

The abstract, quantified timetable of New Zealand schools restricts what can be taught and the methods of teaching. The timetable compartmentalises learning into measured segments of time. Priorities are based on these finite divisions of time, thus decontextualising and fragmenting the learning. Text book learning, which can be confined to the classroom, accommodates the compartmentalised timetable. Māori knowledge and ways of learning, on the other hand, do not fit with a prescribed curriculum or fixed timetables. For example, learning about the signs of nature and the natural environment in context does not fit into fixed timetables. Similarly, Māori learners have little opportunity to learn about their kin networks, their *tūpuna* and tribal histories within meaningful contexts such as *pōwhiri*.

Identity with place is eroded

Traditionally, the land and the natural environment formed an essential feature of Māori identity. When *wā* is eroded, the intimate association with place as a source of identity is eroded. Māori learners do not have the opportunity within the school day to learn about their natural environment through *wā* as it occurs in the land. Māori learners do not have access to the knowledge systems and innate wisdoms inherent within their natural environment – for example, the Ōtāne and Ōrongonui phases of the moon that convey favourable conditions for planting sweet potatoes. Māori students lose the awareness that time is located in every feature of creation, including man, and that time is understood as dynamic and as a symphony of that connectedness. The sense of well-being and of being co-creators in life, which is generated from the intimate association with the land, is diminished. Time and learning for Māori loses its organic, dynamic value; and identity with place becomes (for some) an abstract concept.

Identity with kin networks is eroded

Learning about kin networks, *tūpuna* and the past are important sources of identity for Māori learners. When cyclical *wā* is replaced by linear time, two important ideas about time are lost to Māori: the past exists in parallel with the present; and timeframes entwine the past, including the invisible realms, the present and the future. When these notions associated with *wā* are lost, Māori learners have a limited understanding of the concept of *whānau*, *hapū*, *iwi*

and (with that) the concept of *whanaungatanga*. The bonds Māori have with their kin networks and the past are devalued. In the course of their learning in New Zealand schools, Māori learners do not have access to knowledge about their *tūpuna* or tribal histories, both of which inform and affirm Māori identity. Knowledge and wisdoms handed down from the past are not available to them to derive meaning, understand the present, and construct the future.

The second part of this section will look at how time works to relocate Māori learners within Western frameworks of meaning.

Time fosters Western cultural identity

The timetable and control

Wā is relative and dynamic; as a consequence, Māori traditionally managed their lives to allow for its contingent nature. Māori were ready to accommodate and respond to others, or to opportunities as they arose. When Māori learners enter schools these days, however, their innate awareness of *wā* (constituted in relation to their own personal rhythms, the natural rhythms of the land and their community) is replaced by a standardized timetable. The timetable regulates learners' movements and activities, and Māori learners come to believe that time is an external force that can be utilised as a mechanism of control. They learn that man can control time and natural impulses; that order and discipline are virtues; and that punctuality and keeping to time are more important than flexibility and responsiveness, which are innate qualities of dynamic *wā*.

Learning must conform to time

Wā is dynamic; so, traditionally, learning was also dynamic. Traditional Māori education took place in the course of daily living; learning occurred as opportunities arose. Learning was a shared experience between the teacher and the learner, and inquiry and exploration were encouraged. Neither the learning, nor the learning outcome, was predetermined. Learning followed the inclination of the learner and progressed in accord with the time of the learner. Learning in New Zealand schools, however, follows pre-determined stages of linear development. The timetable not only specifies when learning will occur each day, but what will be learned. Prescribed learning leaves little opportunity for the exploration of ideas or discovery learning. The emphasis is on time – not the learning, the task or the needs of the learner. Teachers and learners are made to conform to time; they are timekeepers, as opposed to co-creators in the process of education. Māori learners come to believe that activity must conform to time, and that institutionalised learning has more value than learning that occurs outside of the school or classroom.

Time and pressure

Wā stops and starts. *Wā* is relative; it exists within a defined context and is dedicated to the purpose of that context. Outside that context, time does not exist. There is not the same pressure of time as there is in the Western world. When Māori learners enter New Zealand schools, however, they experience the constant pressure of time created by the belief that time is absolute, time is passing and time is being lost. The belief that time is made up of divisible ‘nows’, creating the potential for ever increasing uses of time, also places pressure on the learner. The timetable reinforces the pressure of time, placing an expectation on learners to perform and to achieve within a given period of time. The timetable reinforces the notion that time must not be wasted, and that every moment must be accounted for. As a result, Māori learners come to think of time as absolute, and that time is being wasted if it is not being gainfully employed in learning that is prescribed by the curriculum.

Time and priorities

Wā is relative and exists in relation to a specific activity. The duration of that activity however, is unspecified. Priorities give pattern to *wā*; for example, *wā* exists in relation to, and is given to the practice of, *whanaungatanga*. The emphasis is on the successful realization of *whanaungatanga*, not on time (Durie, 2001). For example, attending a *tangihanga* for the entire duration might be seen as a priority over attending school. When Māori learners enter schools, however, the value that Māori place on time is replaced by the value that Western society places on time. Māori learners learn that time has exchange value, so the emphasis is always on time. The teacher must use the time of the learner. Time must equal learning and achievement. Māori learners are made to feel the pressure to continually do better and to ‘achieve their potential’ through Western education. They learn that time must not be wasted, and they learn to place value on time rather than practices such as *whanaungatanga*.

Conclusion

Time in New Zealand schools is linear, abstract, quantified and fixed. When Māori learners enter New Zealand schools their experience of time through the timetable is linear, abstract, quantified and fixed. Māori learners do not experience, or have access to, the knowledge inherent in relative, qualitative *wā*, which supports Māori identity formation. Through daily exposure, *wā* is eroded and Māori learners come to associate time with the standardised calendar and clock. As a result, the bonds Māori have with the land and their *whānau*, *hapū*

and *iwi* (kin networks), experienced through a personal relationship with *wā*, are eroded. Māori identity is eroded.

The emphasis in New Zealand schools, through the operation of the timetable, is on time. Whereas *wā* is relative and dynamic, and traditional Māori managed their lives to allow for its contingent nature, Māori in today's schools learn that time is a mechanism of control, which can be used to establish order and instil discipline. Through time, people, activity and learning can be controlled. Whereas learning in traditional Māori settings occurred in context, and as opportunities arose, Māori learners today experience compartmentalised, predetermined learning that takes place within a classroom and within a specified time. The emphasis is on time, not the learner or the learning. Whereas *wā* stops and starts, Māori learners in New Zealand schools experience the pressure of absolute time; that is, the pressure to conform to rigid timetables, to not waste time, to maximise the use of time, to continually strive to do better and to 'achieve one's potential'. Because of the emphasis on time, value is placed on time rather than the fulfilment of cultural practices like *whanaungatanga*.

The next chapter of this thesis will look at the impossibilities and the possibilities for supporting Māori learners to develop or retain their Māori identity in New Zealand schools

Chapter six: What become impossible and possible

Word list: *ako* (teaching and learning); *hapū* (sub-tribe); *iwi* (tribe);

kai (eat, food); *kaikaranga* (caller); *kaitiaki* (guardian, mentor); *karanga* (call); *koha* (gifting, gift); *maara* (garden/s); *manaakitanga* (honouring people); *manuhiri* (visitors); *marae* (the complex that incorporates the meeting house, courtyard); *Matariki* (the Māori New Year, the Pleiades); *Ngā Atua* (the Forces of Nature; the offspring of *Ranginui* and *Papatūānuku*); *ngā marama* (the moons); *ngā pō* (the nights); *ngā wāhanga* (the seasons); *Papatūānuku* (Earth Mother); *pou* (carved posts); *pōwhiri* (official welcoming ceremonies); *pūhā* (sowthistle); *pūrākau* (traditional stories); *Ranginui* (Sky Father); *taonga tuku iho* (treasured legacy); *tangata whenua* (people of the land); *tapu* (sanctified); *Te Ao Māori* (the Māori world); *Te Ao Whānui* (the wider world); *te reo Māori* (Māori language); *tikanga Māori* (Māori culture); *tūpuna* (ancestors); *wā* (Māori notions of time); *waiata* (song); *whaikōrero* (speech making); *whakapapa* (genealogy/ies); *whānau* (extended family); *whanaungatanga* (relationship, kinship, connection); *wharehau* (meeting house).

Introduction

Situating the work

In the previous chapter we examined traditional Māori educational practices in relation to *wā* and Māori identity formation. In traditional Māori settings *wā* and learning were cyclical, relative, qualitative and dynamic. Young people learned about their natural habitat, and the past, through *whakapapa*, tribal histories, and cultural beliefs, in contexts that gave substance to learning. There was a close relationship between the teacher and the learner, and teaching and learning were reciprocal. All of the intelligences were engaged in learning, but importance was placed on listening, observing and doing. Learning did not conform to *wā*, but occurred when the occasion presented itself and when it was appropriate for the learner. Māori identity was affirmed on a daily basis.

Time in New Zealand schools, on the other hand, is linear, abstract, quantified and fixed. Time not only inhibits Māori learners developing and retaining their cultural

identity as Māori, but is instrumental in assimilating Māori learners into Western frameworks of meaning. Māori learners, therefore, have to relinquish their identity as Māori, including their language and cultural beliefs, in the course of their education. This was the point made by Durie (2003) when he asserted that education in New Zealand schools should be as much about preparing Māori learners to participate with confidence in *Te Ao Māori*, as it is about preparing them to contribute to New Zealand society and the wider world with confidence.

This chapter looks at what becomes impossible and, more importantly, what becomes possible for Māori learners to achieve education success and retain their identity as Māori in English-medium schools. Māori identity is constituted in relation to place and kin networks. *Wā*, as has been demonstrated in previous chapters, is instrumental to identity formation. By learning about *wā* in relation to nature, Māori learners learned about their natural environment and developed a unity for the land they inhabited. By learning about *wā* in relation to the past, Māori learners learned about their *tūpuna*, tribal histories and cultural beliefs; they developed an affinity with their *tūpuna* and kin networks. By learning about *wā*, Māori learners learned that priorities give form to *wā*; for example, the successful realization of *whanaungatanga*. What opportunities, therefore, will Māori learners have to learn about *wā* in New Zealand schools?

Pedagogy also plays an important role in Māori identity formation. What opportunities are there for learning to occur in context, by listening, observing and doing? What opportunities are there to engage in teaching/learning relationships that are reciprocal and dynamic? What opportunities are there for learning that engages the heart and the intuitive senses, as well as the physical self, the social self and the intellect?

The answers to these questions will be explored in terms of factors that impede, and opportunities that facilitate, Māori learners enjoying and achieving education success while maintaining and enhancing their identity as Māori. These two categories will constitute the first two sections of this chapter. The final section will look at emerging educational models that are based on, and reflect, aspects of cyclical, relative, qualitative and dynamic *wā*.

Factors that impede education success as Māori

If we are considering the factors that impede Māori learners enjoying and achieving education success while maintaining and enhancing their identity as Māori, then the timetable as it currently exists is certainly a factor. Another factor is the New Zealand Curriculum. The national curriculum and the timetable are power structures that determine what knowledge will be taught, when and how. Both promote Western identity formation, to the exclusion of Māori identity formation. The timetable cannot achieve its purpose without the New Zealand Curriculum, and vice versa.

The Timetable in New Zealand Schools

Historical attitudes and power structures inherent in the way time is manipulated in New Zealand schools act in the interests of Western identity, culture and language. The use of the timetable in New Zealand schools emanated from the British education system; its purpose was to instil discipline and to condition the children of working-class families into the working hours of the factories. The factories needed workers who were easily controlled and could be relied on to be punctual and productive (Thompson, 1967). The structure and purposes of time in schools has changed little in the intervening years. The timetable in New Zealand schools continues to operate as a mechanism of control and discipline. But, more than that, the timetable is involved in processes of social reproduction or, in the case of Māori learners, assimilation into Western culture. While the timetable continues to function as it currently does in New Zealand schools, Māori learners are impeded from enjoying and achieving education success in ways that affirm and support Māori identity formation.

The New Zealand Curriculum

Because the New Zealand Curriculum is not the focus of this thesis, I only cite two examples that demonstrate how the New Zealand Curriculum fails to value Māori knowledge – in particular *te reo Māori* and *tikanga Māori*, which are fundamental aspects of Māori identity.

The place of *te reo Māori* within the New Zealand Curriculum

Te reo Māori is the one subject in the New Zealand Curriculum that directly relates to, and supports, Māori identity formation. The Ministry of Education (2009) appears to agree when it states, “te reo Māori ... is the vehicle through which Māori culture, spirituality and thought are expressed. Through te reo Māori, Māori learners can affirm their identities and access te Ao Māori and Māori world views” (p. 24). What then, is the place of *te reo Māori* in the New Zealand Curriculum?

The knowledge that is included in the national curriculum is determined by the dominant culture (Apple, 1993; Tomlins-Jahnke, 2008). To this assertion, Illich (1971) would add that institutionalised education is a means of defining what is legitimate and valuable, and what is not. What is legitimate and valuable in New Zealand society is reflected in the New Zealand Curriculum, which determines what and how knowledge is organized, resourced, taught and evaluated. While the New Zealand Curriculum determines that Learning Languages is a learning area, *te reo Māori*, which strongly affirms Māori identity, is not. Schools are obliged to teach a language. While *te reo Māori* is an official language of New Zealand, schools may teach *te reo Māori* if they elect to, but there is no obligation to do so. The likely outcome, as a result, is that *te reo Māori* will not be taught in some English-medium schools or will be taught in an ad hoc fashion.

Key Competencies or Cultural Competencies

The New Zealand Curriculum sets out five Key Competencies: ‘managing self’; ‘relating to others’; ‘participating and contributing’; ‘thinking’; and ‘using language, symbols, and texts’ (Ministry of Education, 2007).

Key Competencies relate to the development of values and capabilities necessary for participating and contributing in social contexts; for example, learning contexts or society. Asked to comment on commonalities between the key competencies and Māori knowledge, beliefs and practices, Macfarlane, Glynn, Grace, Penetito & Bateman (2008) found:

While there is evidence of some commonality in meaning between particular key competencies and particular Māori constructs, there is more evidence of where the Māori constructs did not ‘match’, because they were coming from quite different knowledge and value bases, and their meaning within a Māori

worldview was both wider and deeper than the meaning within the majority European cultural worldview. (p. 123)

Macfarlane et al. (2008) pointed out that ‘managing self’, as an example, promotes individualism and individual achievement, which is in contradiction to the Māori cultural ideal of balancing individual achievement against responsibility to the group. On the other hand, Macfarlane et al. (2008) proffered, Māori cultural constructs have the potential to both enrich the development of the national curriculum and to benefit all learners.

Both the timetable and the New Zealand Curriculum are formidable power structures that together operate in New Zealand schools to reproduce the ideologies inherent in New Zealand society. Rather than support Māori learners to maintain or enhance their cultural identity, the timetable and the New Zealand Curriculum work to assimilate Māori learners into Western culture. These two power structures endorse Western knowledge, pedagogies, and cultural values over Māori educational priorities. If schools do not offer *te reo Māori* programmes, and if schools do not incorporate *tikanga Māori* in to everyday school practices, then there will be very few opportunities for Māori learners to engage in learning that supports Māori identity formation.

Opportunities that facilitate education success as Māori

The principle means for organising time in most New Zealand schools is the timetable. We know that the timetable confines and constrains learning, and therefore acts as a barrier to Māori learners accessing knowledge and learning in contexts that validate Māori identity.

The second section of this chapter will look at opportunities, other than *te reo Māori* and *tikanga Māori*, for schools to support Māori learners to develop and retain a secure Māori identity. While the responsibility rests with *whānau*, *hapū* and *iwi* in the first instance, to nurture and educate their young people in terms of Māori identity, schools play a critical role in reinforcing Māori cultural identity (Ministry of

Education, 2012). Opportunities to learn about, and experience, *wā* are presented here as a sample, namely: learning about the past in the context of the marae and learning about *wā* in relation to the natural environment.

Learning about the past in the context of the marae

One of the few places left to witness and experience *wā*, particularly in relation to the past, is the *marae* – through *tūpuna* and tribal histories that are recounted during speech making, through the *wharenui* itself and during the *pōwhiri*.

Wā, Tūpuna and Tribal Histories

Visiting the local *marae* is an opportunity to build relationships with the *tangata whenua*, and to learn about prominent *tūpuna*, local histories and historical sites that are significant to the *tangata whenua*. While many Māori learners live outside of their traditional homelands, visits to local *marae* provide Māori learners with an opportunity to learn about, and be located in, cultural environments that nurture and affirm Māori identity. Such culturally-grounded learning experiences also allow Māori learners to reflect on their respective *tūpuna*, homelands and tribal histories.

Schools could arrange visits to a local marae, with the goal of experiencing and learning about *wā*. As a consequence, learners will have the opportunity to reflect on the following aspects of *wā*: *wā* is relative to *tūpuna* and important historical events; through *wā*, *tangata whenua* have a personal relationship with *wā*; when Māori re-live their histories they are engaging with *wā* and reconnecting to the past, which is significant in the present; and, in former times, *tūpuna* and important historical events were the only framework for time.

Example

Visiting local marae may have little benefit to Māori learners in terms of learning that supports identity formation, if such visits are an isolated event. However, if there is an on-going relationship with the local *marae* and Māori community, the experience can be mutually beneficial, as in the following example:

Te Kotahitanga is a professional development initiative that places Māori

knowledge, pedagogy, cultural beliefs and practices at the heart of teaching and learning. When I was involved in Te Kotahitanga, one of the schools in the initiative developed a strong relationship with the local Māori community. A member of that community was assigned to the school, and worked with the teachers so that they could incorporate into their lessons, knowledge that was specific to the *tangata whenua*. Sometimes team teaching occurred, with the local community member retelling local histories in the course of the lesson. Lessons did not only occur in the classroom, but also at the local *marae*. *Whanaungatanga*, *manaakitanga* and *ako* were integral to the relationship that developed between the teachers and the local Māori community, which contributed to the success of a dynamic partnership.

Wā and the Wharenuī

Wharenuī embody *wā*, particularly in relation to the past. When learners approach and enter the *wharenuī* they will have the opportunity to witness and consider the following aspects of *wā*: timeframes entwine the past (including the realms of *Ngā Atua*), the present and the future; and the past exists in parallel with the present (there being a continuous dialectic between the past and the present).

Timeframes entwine the past (including the realms of Ngā Atua), the present and the future

Two realities exist in the Māori world: the invisible realms, which transcend time and space, and the material realm of *Te Ao Mārama* in which time and space are finite. These concepts about *wā*, the metaphysical and the material, are apparent in the *wharenuī*.

According to Barlow (1991), the *wharenuī* was traditionally designed to represent *Ranginui* and *Papatūānuku* in their nuptial embrace. *Papatūānuku* was the earthen floor and the *pou* lining the *wharenuī* portray *Ngā Atua*, the children of *Ranginui* and *Papatūānuku*, endeavouring to separate their parents. The interior of the house represented the invisible realms of *Ngā Atua*, while the exterior of the house represented *Te Ao Mārama*, the world of man. The doorway is the figurative threshold between the two cosmological orders. Moving from the invisible realms of *Ngā Atua* to the material realm of *Te Ao Mārama* symbolizes a change of state, as the material

proceeds from the non-material. The invisible and the material are shown as different but interconnected realms that co-exist in *Te Ao Mārama*.

In modern times the *wharenuī* has come to represent the body of a central ancestor. While the modern *wharenuī* has altered from the traditional model, the invisible realms are still represented in the modern design, creating an environment in which the infinite and the finite, the metaphysical and the material, co-exist. The underlying purpose of the modern *wharenuī* is to act as a link to the invisible realms (which are the source of metaphysical knowledge), to *tūpuna* (which are the source of tribal history and tradition), and to the land.

The past exists in parallel with the present

To Māori the *wharenuī* is a living ancestor. Linzey (2004) notes, “the architecture of the Māori is radically alive – it is not merely symbolic but is imbued with meaning” (p. 13). The carefully conceived aesthetic of the *wharenuī* integrates several domains of art, *whakapapa* and the metaphysical (Linzey, 2004). This network of signs creates a cosmic timelessness in which the metaphysical, the remote past and the recent past are reconciled in the present (van Meijl, 2006). Surrounded by their *tūpuna*, the mythological characters and *Ngā Atua*, Māori are figuratively and literally located in their past. Ancestors and events in history live on through the *wharenuī*, ensuring that the past (which is an important source of identity, culture and language) is passed on to successive generations.

School Marae

Some schools have their own *marae* and while the *wharenuī* are, for the most part, built for the purpose of education, they are none-the-less places in which Māori learners can be encompassed within those aspects of *Te Ao Māori* that nurture their identity as Māori; for example during *pōwhiri* that take place on the marae.

Wā and the Pōwhiri

The *pōwhiri* is one of the few traditions left to Māori that continues to reflect and express *wā*. When Māori learners engage in *pōwhiri* they will witness and experience the following aspects of *wā*: *wā* conforms to cultural priorities; timeframes entwine

the past (including the realms of *Ngā Atua*), the present and the future; and circular patterns, not unlike the cycles of nature, are enacted through the rituals of the *pōwhiri*.

***Wā* conforms to cultural priorities**

During a *pōwhiri*, Western time is suspended in deference to *wā*. As Durie (2001) points out, the emphasis during a *pōwhiri* is not on time, but “allowing time for the full elaboration of events and discourses” (p. 77). *Wā* conforms to the proper fulfilment of cultural principles that are of value to Māori. For example, the *pōwhiri* revolves around two important principles: *manaakitanga* and *whanaungatanga*. *Wā* is ordered to fulfil those processes, which ensure the establishment and maintenance of relationships that will have ongoing significance for the people in attendance (Durie, 2001). The pace of the *pōwhiri* is often set by the speakers; the priority is not to keep to time but to give people time to say what they want or need to say in order to realize customary obligations and demonstrate a commitment to lasting relationships (Durie, 2001).

Timeframes entwine the past (including the realms of *Ngā Atua*), the present and the future

The *pōwhiri* begins with the *karanga*, which is the signal for the *manuhiri* to proceed on to the *marae*. The *karanga* invokes the invisible realm and is a reminder that the metaphysical permeates the material world of man. The *kaikaranga* acknowledges first the *manuhiri* (visitors) and then the deceased who are associated with the visitors coming onto the *marae*. It is during the *karanga* that the *marae* and the visitors become *tapu* (Barlow, 1991) in preparation for the speeches.

Like the *karanga*, the *whaikōrero* acknowledges that the invisible realms, the past and the present are intertwined. Through *whaikōrero*, reference is made to *Ngā Atua*, to the *marae*, to the *whareniui* and to the land, thereby locating the present within the greater context of the metaphysical and the past. In former times, it was customary for orators to recite comprehensive *whakapapa* in the course of their speeches. This served to bring *tūpuna* and the past to the fore and, importantly, to unify all those in attendance – the living and the deceased (Durie, 1998). It is through the *whaikōrero* and the *waiata* that those in attendance are reminded of their connection to the past, which is the source of Māori identity, tradition and language.

The rituals in the *pōwhiri* resemble a circle

The movements and symbolism of the *pōwhiri* resemble a circle (Durie, 2001) or a spiral. These circular patterns are not unlike the cyclical patterns of nature. A circular relationship is established between *tangata whenua* (who are the connection to the land) and *manuhiri*; and this is reinforced through the rituals of the *pōwhiri*. For example, the *karanga* begins with the *tangata whenua*, and is responded to by the *manuhiri*, but the final *karanga* rests with the *tangata whenua*. Likewise, the speeches proceed in a circular fashion starting with the *tangata whenua*, extending out to include *manuhiri*, and finally returning back to the starting place, the *tangata whenua* (or the land). The circular relationship is also reflected in the practice of *koha*. As Durie (2001) explains, “the primary purpose of *koha* ... [is] to strengthen ties and create mutual obligations” (p. 79). Such relationships are based on reciprocity and are intended to endure over the generations. All the while, these circular patterns, enacted through ritual, are progressing toward an end point, in preparation for the next stage of the proceedings.

Example

Some schools incorporate *pōwhiri* into school practices and they become a normal occurrence in the school for teachers and learners. I once hosted a visitor from Wales who was conducting research on the revitalisation of indigenous language through education. I contacted the principal of a local school to arrange a visit. The following morning, we were welcomed onto the school with a *pōwhiri*. *Whānau* who were in the school that morning participated in the *pōwhiri*, as did the teachers and learners from the bi-lingual unit, the principal and senior leaders. The *pōwhiri* took place without concern for time and it was obvious that this was not an unusual event for this school. The *pōwhiri* was followed by morning tea and then we were invited into the bi-lingual unit to observe the teaching and learning.

Learning about *wā* in relation to the natural environment

Opportunities to learn about the natural environment in ways that reinforce Māori identity in relation to the land are obviously limited in English-medium settings. There are of course more opportunities for Māori learners to learn about their natural

environment in rural schools, which will have personal significance for Māori learners who are also *tangata whenua*. An alternative then is to provide opportunities for Māori learners to learn about cyclical, relative, qualitative and dynamic *wā*, although the learning will have little impact without meaningful experiences.

Experiencing the concept of *wā* through inquiry learning

In chapter three, the concept of *wā* was described as follows: *wā* exists within a defined context, and is dedicated to, and defined by, the purpose of that context. Outside of that context, *wā* does not exist (the notion of timelessness). Inquiry learning lends itself to *wā*, and could provide the context for *wā*, as opposed to learning that is compartmentalized by a timetable and must conform to time. If possible, learners should abandon clock time for the duration of inquiry learning. What do learners experience when learning, activities and movement are not controlled by the clock?

I offer these inquiry topics in relation to learning about *wā* as examples:

Māori learners could be introduced to cyclical *wā* during the advent of *Matariki*. Learning about cyclical *wā* provides the opportunity to learn about relative, qualitative and dynamic *wā*. Why were stars important to Māori? How do you read stars and what do they tell you? What other signs occurring in nature indicate when and where to collect or hunt for food? What is relative *wā*? Does timelessness really exist?

Māori learners could be introduced to the principal divisions of *wā*; for example, *ngā wāhanga*, *ngā marama* and *ngā pō*. Who within the *whānau*, *hapū* or *iwi* still has knowledge about, and refers to, the Māori calendar for eeling, fishing, hunting and gardening?

Māori learners could inquire into, and set out, a *maara* using traditional methods. How did Māori know when to set out *maara*? How were *maara* set out? What traditional instruments were used?

Wā is the key to an intimate knowledge of the natural world; it is this knowledge that creates a sense of identity or an affinity that Māori have with their natural habitat. The natural world is an important source of knowledge for Māori learners; it is a text-book, but an open text-book that is alive, energized and interactive.

In traditional times (and also today) Māori had an extensive knowledge of their natural environment. As Firth (1929) points out, "... the Māori of olden time was remarkably well versed in all matters pertaining to his natural surroundings" (p. 42). Māori lived in accord with their natural environment and understood themselves to be part of the natural order, not separate or superior to it. As such, Māori understood the natural world to be "the embodiment of knowledge" and "a teacher for the human person"; and the natural world could "'live in' and 'speak into' the consciousness of the human being" (Royal, 2005, p. 3). This perception of the natural world changes the idea of knowledge into an "energy rather than a finite product" (Royal, 2005, p. 3). When we start to understand knowledge as energy, the fundamental principles upon which education is currently based changes. Knowledge and learning can no longer be linear, abstract, quantified and fixed; learning becomes cyclical, relative (intensely personal), qualitative and dynamic.

The past is still significant in the lives of Māori learners

Taonga tuku iho (knowledge handed down from *tūpuna*) is still valid for Māori learners today not just in terms of identity; as in former times, the past can be reinterpreted or applied within present-day contexts. For example, learning about the natural environment includes environmental studies and conservation, horticultural practices, science, economics and literacy (reading, interpreting and interacting with nature). Learning about *whakapapa*, *whaikōrero*, *mōteatea* and *pūrākau* includes poetry, proverbs, the use and interpretation of metaphor, structuring a speech or a story and literacy (listening, speaking and singing as a means of calling the past into the present). Learning about *tikanga* includes embodying *whanaungatanga* and *manaakitanga* in order to build and maintain relationships.

Learning about, and from, *tūpuna* and tribal histories has broader implications for Māori learners. For example, learning about the past, including New Zealand's recent

colonial past, enables Māori learners to not only reconcile the past with the present, but also to construct a positive future. Learning about *tūpuna* and the past provides Māori learners with role models and practical models for living, such as organisational skills, resourcefulness and resilience.

The past and the natural environment, as has been shown, is an important source of knowledge and identity for Māori learners. Opportunities to learn in ways that support Māori learners to develop a secure identity as Māori in English-medium schools, however, are restricted by the timetable (and the New Zealand Curriculum) and are, for the most part, consigned to localized experiences. What alternatives are available to Māori learners within English-medium education? The next section of this chapter looks at some exciting developments in English-medium schools that enable Māori learners to enjoy and achieve education success while maintaining and enhancing their identity as Māori.

Education based on cyclical, relative, qualitative and dynamic wā

Do English-medium schools prepare Māori learners to both participate in *Te Ao Māori* with confidence and to succeed in New Zealand society and the wider world? The evidence suggests that education is failing Māori learners on both counts. Recent statistics indicate that, “less than half of Māori youth will leave secondary school with NCEA Level 2 or better” and “over a third of Māori students will leave school without any qualification at all” (Ministry of Education, 2013, p. 3). We know also that time is a controlling and confining factor that prevents Māori learners from participating in meaningful learning experiences that validate and affirm Māori identity. Given the evidence, we would have to say that English-medium schools are failing the majority of Māori learners both in terms of academic success and affirming their identity as Māori.

If the current education system does not support Māori learners to achieve education success ‘as Māori’, then what is the answer? According to Bishop, Berryman, Cavanagh, & Teddy (2009) the solutions to Māori educational disparity do not lie in the mainstream. Educational practices in New Zealand schools, they stress, “ have

kept Māori in a subordinate position, while at the same time creating a discourse that pathologized and marginalized Māori peoples' lived experiences” (Bishop et al., p.741). Milne (2009) asserts that there is a need to re-evaluate the fundamental principles upon which Māori learners are being educated. Penetito (2010) concurs and adds that the answer lies in alternatives that value Māori educational priorities.

What then might alternative educational practices consist of? Bishop, Berryman, Cavanagh, & Teddy (2009) believe that alternatives should come from Māori “cultural sense-making processes” (p. 741). Milne (2009) adds, “it is time to ... develop learning models that will allow [Māori learners] to develop secure identities throughout their learning experience at school” (p. 18). Penetito (2010) agrees, insisting that a secure Māori identity is a “valid end point in itself” (p.52). Tomlins-Jahnke (2008) adds that Māori knowledge, history, language and culture need to be integrated throughout the curriculum so learning that validates Māori identity is not merely a localized experience. The views expressed here echo those articulated so compellingly by Durie (2003) when he stated that education must reflect and reinforce Māori identity, as well as prepare Māori learners to succeed in wider contexts. The answer then, it would seem, is to emphatically place Māori identity, knowledge, language and culture at the heart of education for Māori learners.

The next part of this section looks at two schools: Tai Wānanga and Te Whānau o Tupuranga, both of which represent a new way of thinking about Māori education. Tai Wānanga and Te Whānau o Tupuranga are modeled on traditional Māori educational practices that affirm Māori identity while at the same time equipping Māori learners to succeed in wider contexts. Both schools position Māori knowledge, language and culture at the centre of education; they are based on, and reflect, learning that portrays cyclical, relative, qualitative and dynamic *wā*.

Tai Wānanga

Tai Wānanga is a Designated Character school for Year 9-13 students. It operates within a uniquely Māori environment and embodies ‘Māori succeeding as Māori’ (Tai Wānanga, n.d.).

Learning is the constant, time is the variable

In traditional Māori education, learning was cyclical, relative, qualitative and dynamic. Learning was not confined or constrained by time. Learning occurred as opportunities arose or demanded. Similarly, Tai Wānanga operates on a flexible timetable that collapses when necessary. For example, if a student has an assignment due at the end of the week, the timetable collapses to allow the learner to focus on that assignment (Riches, personal comment, June 28, 2013). The emphasis is on the learner and learning, not conforming to a rigid timetable. This is in contrast to the linear, abstract, quantified, rigid timetable of English-medium schools, which fixes what, when and how learning will occur.

An individual learning plan for each learner

In traditional Māori education, learning followed the inclination and the interests of the learner and was guided by elders. Similarly, Tai Wānanga provides a flexible system that accommodates the learning requirements of the student. Individual teaching and learning plans are developed in consultation with the *kaitiaki*, the learner and the learner's *whānau* (Riches, personal comment, June 28, 2013). Individual learning plans are based on the personal interests and career aspirations of the learner; and a learning pathway is tailored to ensure the learner achieves his/her personal goals. Tai Wānanga also recognizes that learners are at different stages in their learning, so programmes are multi-levelled and multi-aged. Learners are personally located in their learning. By contrast, learning in New Zealand schools follows pre-determined stages of linear development and is not tailored specifically to meet the learning needs of the learner. Learners and learning are made to conform to pre-determined learning programmes, for the most part determined by age and not ability.

The teacher:learner relationship is central to teaching and learning

In traditional Māori education settings, the relationship between the teacher and the learner was central to the education of young people. *Hākui* and *koroua* took a personal interest in the well-being and daily development of their *mokopuna*; they guided them in their learning and their life pathways. Because of the close bond, education was holistic and involved the total well-being of the *mokopuna*. Similarly, in Tai Wānanga, *kaitiaki* are responsible not just for the intellectual, but also the

physical, emotional and spiritual well-being of the learner (Tai Wānanga, n.d.). By contrast, the focus in English-medium schools is on academic learning; there is not the same emphasis on relationships. The teacher often takes on an authoritative role, rather than that of a *kaitiaki* who mentors and monitors, in a very personal way, the development of the learner.

Te Whānau o Tupuranga

Te Whānau o Tupuranga is the Centre for Māori Education within Kia Aroha College, a Designated Special Character school for Years 7-13 students (Te Whānau o Tupuranga, n.d.).

The vision of Te Whānau o Tupuranga, developed in consultation with *whānau*, articulates the overarching goal of Ka Hikitia, which is that Māori learners are enabled to enjoy and achieve education success while maintaining and enhancing their identity as Māori (Milne, 2009). Māori identity is continually reinforced through school-wide practices and learning programmes that incorporate Māori knowledge, *te reo Māori* and *tikanga Māori*. Māori identity is reinforced on a daily basis in Te Whānau o Tupuranga, through learning environments and teaching practices that reflect cyclical, relative, qualitative and dynamic *wā*.

The teacher:learner relationship is central to teaching and learning

Because the philosophy of the school is based on *whanaungatanga*, relationships are central to teaching and learning – whether that be the relationship between the teacher and learner, or the relationship between learners. Teaching and learning are based on the principles of *ako* and *tuakana/teina*. The significance of *ako* to Te Whānau o Tupuranga is conveyed through the statement, “[when] you receive learning, you share it, you give it back to other learners” (Te Whānau o Tupuranga, n.d., p. 2). Learners work in collaboration with their teachers and with other learners, and learning is a shared experience.

Teaching and learning is relative, qualitative and dynamic

Learning is not abstract or pre-determined, but is relative to the day-to-day lived reality of the learner (Te Whānau o Tupuranga, n.d.). Learning is negotiated between teachers and learners, is inquiry-based and generated by learners' questions. These questions open up new pathways of learning, which are dynamic. Neither the learning, nor the outcome, is pre-determined. Critical inquiry is also encouraged and is likewise generated by issues that are of concern to learners or matters of social justice. Because learning is inquiry focused, the curriculum is integrated, rather than taught as individual subjects that are fragmented and compartmentalised by a fixed timetable.

Learning does not conform to time

Learning is not controlled or confined by a fixed timetable, nor are learners made to fit into linear programmes of learning that are pre-determined. Learning is personalised and differentiated to fit with the learning needs and style of the learner. Multi-age and multi-levelled learning programmes are designed to complement the requirements of the learner (Te Whānau o Tupuranga, n.d.). The school day is divided into three ninety-minute blocks; bells do not ring or control the movements of teachers and learners. The timetable is flexible; learners can work intensively in double blocks, or the timetable can be collapsed altogether. Timeframes are negotiated when the learning is negotiated at the beginning of each new topic. Teachers and learners are not made to conform to time, but are co-creators in the process of education.

Learning takes place in contexts that affirm Māori identity

Learning spaces are not compartmentalised but open and flexible – in keeping with creative, holistic learning environments. There are no internal walls or closed spaces. Teaching is not confined to a classroom and there are no fixed whiteboards or other devices that indicate a 'front of the classroom' (Te Whānau o Tupuranga, n.d.). Because of the open plan design, the indoor spaces are not disconnected from the outdoor spaces (which are planted in native trees, flaxes and grasses). The openness of the design welcomes *whānau* into the learning spaces and allows them to participate in the education of their children.

The school marae, Kia Aroha, is central to school life and is used extensively. The *marae* provides an authentic context in which Māori learners can experience and practise *tikanga*; for example, hosting *manuhiri*, and extending *whanaungatanga* and *manaakitanga*. There is a *marae* garden, which is a source of food. The important role of Kia Aroha was summarised by staff as a place where learners are:

Sustained with ancestral traditions, ancestral knowledge, unfailing love, nurturing, belief, a striving spirit, righteousness, kindness, and skills, where they develop an openness of mind, and become alert, alive, eager, and brave, where a child learns to treat kindly their world, and the surroundings that shelter them, and become aware of those that can harm them. From here growth is seen as reaching the uppermost heights of the realisation of their aspirations, and dreams. (Milne, 2009, p. 11)

Kia Aroha marae is the heart of the school and a context in which Māori learners can experience *wā* and what it means to be Māori in its fullest expression. However, these experiences are not confined to the school marae or a localized experience. Living and learning as Māori, as has been shown, is experienced throughout the school and learning practices.

Conclusion

Tai Wānanga and Te Whānau o Tupuranga foster all those elements found in traditional Māori educational practices that affirm Māori identity: learning within a personal and caring context; living in accord with the natural environment; the significance of the past; learning by experiencing and participating in cultural contexts; and learning with an open mind and curiosity. Learning does not conform to time, nor do cultural practices conform to time. Learning is experienced in contexts that reflect cyclical, relative, qualitative and dynamic *wā*.

Chapter seven: Conclusion

This research set out to examine cultural ideas about time as a means of critiquing the Ministry of Education (2009) achievement goal: ‘Māori enjoying and achieving education success as Māori’. I argued that as time is integral to, and an expression of, culture, time is therefore significant to the possibilities for Māori learners succeeding ‘as Māori’.

The educational ideal ‘Māori enjoying and achieving education success as Māori’ requires a fundamental shift and revision of educational practices. Western time is the most obvious, and at the same time, the most taken for granted, barrier to Māori education success ‘as Māori’. Time in New Zealand schools is a manifestation of the priorities in Western culture and society, and through daily exposure, Māori learners are accustomed to Western time and assimilated into Western cultural beliefs and values. Over time, Māori learners, like all learners in New Zealand schools come to accept that Western time is time per se.

Western worldview has a taken for granted dominance and time is an example of this dominance. From the establishment of the Native Schools, generations of Māori learners have been educated in contexts that validate Western cultural identity. It is not difficult to see that Western time, in the way it is structured and used, and the associated educational practices, have had a profound influence over generations of Māori. In these educational settings there are few opportunities to learn about or experience *wā* in cultural contexts such as *pōwhiri*. There are few opportunities to learn about the past – histories that are relevant to Māori learners as opposed to histories that have no relevance and do not validate Māori identity. There are few opportunities to experience cyclical, relative *wā* or to think of time as anything other than fixed or quantified. All of these aspects of *wā* are integral to a secure Māori identity.

The challenge presented in *Ka Hikitia* for the education sector is about a shift in orientation toward Māori, and a willingness to engage with Māori in a way that acknowledges and values *wā* and therefore Māori knowledge, *te reo Māori* and

tikanga Māori, all of which strengthen Māori identity. A shift away from deficit, failure, and disadvantage is a critical first step toward something different in terms of education for Māori learners. Without such a shift in mindset, it is difficult to accept different perspectives on time or to acknowledge the potential of culture and cultural pedagogies to enhance an out dated education system.

Tai Wānanga and Te Whānau o Tupuranga are modelled on *wā*. These schools are relative, qualitative and dynamic in their approach to teaching and learning and emulate many traditional Māori educational practices. Tai Wānanga and Te Whānau o Tupuranga have created learning environments that allow Māori learners to experience and practice *te reo Māori* and *tikanga Māori*, and to engage in learning experiences that enhance their identity as Māori on a daily basis. They are able to do this because they are prepared to question the fundamental assumptions upon which education in New Zealand schools are based. Exploring possibilities has led these schools to discover rich ideas and innovative ways for thinking about education for Māori learners. Both schools use time differently. Time is not a mechanism of control; time is given to cultural practices such as *pōwhiri* and *whanaungatanga*. Timetables are not fixed or used to compartmentalise learning; learning programmes are personalised to meet the needs and the interests of learners.

Final word

If we return to Durie's (2003) statement that "education should be consistent with the goal of enabling Māori to live as Māori" (p. 199), then we need to look no further than *wā*. *Wā* is fundamental to living as Māori: *wā* is integral to *te reo Māori* and *tikanga Māori*; *wā* is the key to knowledge - knowledge about the past, the natural environment, when and how to set out *maara*, how to treat illness, and *mātauranga Māori*; and *wā* underpins traditional educational practices and pedagogies. *Wā* in short, is fundamental to a secure Māori identity.

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Abstract

This research takes the example of time as a means of critiquing the possibilities for the Ministry of Education's achievement goal: 'Māori enjoying and achieving education success as Māori'. The two words 'as Māori', in particular underscore substantial changes for educating Māori learners. According to Durie (2003) education should not only prepare Māori learners to participate in New Zealand society (and the wider world), but importantly, to participate with confidence in Te Ao Māori. For New Zealand schools this is a new direction and requires a revised approach to education for Māori learners. Time is integral to culture. The New Zealand education system, based on Western time, expresses Western culture. Time as it functions in New Zealand schools not only prevents Māori learners from experiencing and practising Māori culture and language, but is also instrumental in assimilating Māori learners into Western cultural frameworks. Starting with Māori notions of time, this research explores the relationship between Māori notions of time and Māori identity as a means of exploring educational practices that enable Māori learners to achieve education success as Māori.

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Ko Te Rangiwakaewa te tangata
Ko Makirikiri te marae
Ko Ngāti Mutuahi te hapū
Ko Kurahaupō te waka
Ko Rangitāne te iwi
Tīhei Mauri Ora!

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Ngā mihi aroha ki a koutou.

Preface

Ko tōu reo
Ko tōku reo
Te tuakiri tangata
Tīhei uriuri!
Tīhei nakonako!

Your voice
My voice

It is an expression of identity
Behold, the message! Behold, the messenger!

(Pohatu, as cited in Ministry of Education, 2009, p. 13)

Voice, in the whakatau-a-kii or proverb above refers to the voices of all creation animate and inanimate, including the winds, the creatures of the oceans, the trees of the forests, and the peoples of the world. This proverb describes a Māori view in which the world is not singular but a multiplicity of relational worlds connected through whakapapa (geneology). In this dynamic universe there is no central authority. Instead, relationships are maintained through a creative system of balance and reciprocity (Metge, 1976; Marsden, 1992; Barlow, 1991; Nepe, 1991; Hoskins, 2001, Royal, 2005). This whakatau-a-kii states that each voice is an expression of identity, and all voices have a right to be heard by virtue of their being. ‘Tīhei uriuri’ – ‘behold the words being spoken and how the message is being conveyed’. ‘Tīhei nakonako’ – ‘behold, take note of who speaks’.

I am Rangitāne, Ngāti Kahungunu and Ngāti Rangiwewehi. So too are my children. We are also citizens of New Zealand and the wider world and have taken on these identities as well. The culture that has most meaning in my life, and which I have deliberately fostered in our home, is Māori culture. Although my children have grown up away from their marae, they know where they are from and the importance of their *tūrangawaewae* or place of belonging as their ancestral home. We do not speak *te reo*

Māori (Māori language) in our home but my children observe *tikanga Māori* (Māori culture) and practice cultural values as part of their day-to-day lives. My children identify as Māori by virtue of both their upbringing and an innate ‘cultural knowing’ inherited through whakapapa.

Te reo Māori and *tikanga Māori*, which are the cornerstones of Māori identity, were not a priority in any of the schools my children attended. In their school lives my children were required to navigate and reposition themselves daily in relation to educational contexts and practices that did not cater for Māori learners. My children have struggled at times to maintain a sense of self and to feel confident about being Māori as a result of their educational experiences. My expectation is that ‘Māori enjoying and achieving education success as Māori’ will address the failure of the New Zealand education system to support Māori children to gain an education without having to compromise or feel conflicted about who they are as Māori. Ka Hikitia expresses a broader hope that my children and future generations of Māori will be able to participate in New Zealand society ‘as Māori’ and that New Zealand society will value the contribution that Māori can make to education, to Te Ao Māori and Te Ao Whānui (the Māori world and wider society).

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Chapter one: The educational goal of Māori succeeding 'as Māori': The case of time

Word list: cosmogenic whakapapa (the creation genealogies); *Io* (Source of all Life, Supreme Being); *kaumātua* (elder); *marae* (the complex that incorporates the meeting house, courtyard); *Ngā Atua* (the Forces of Nature); *Ngā Kete o te Wānanga* (the Baskets of Knowledge); *Papatūānuku* (Mother Earth); *pito* (section of the umbilical cord); *pūrākau* (traditional stories); *Ranginui* and *Papatūānuku* (the Primordial Parents); *Te Ao Māori* (the Māori world); *Te Ao Mārama* (the Natural World); *Te Ao Whānui* (the wider world); *te reo Māori* (Māori language); *Te Kore* (the Void, the Nothing); *Te Kore* and *Te Pō* (Void Abyss Night); *Te Pō* (the Ages of Night); *tikanga Māori* (Māori culture); *wā* (Māori notions of time); *whenua* (placenta).

Introduction

This research will examine cultural ideas about time as a means of interrogating the possibilities for the Ministry of Education (2009) achievement goal: 'Māori enjoying and achieving education success as Māori'. In short, 'success as Māori' appears to be an ideal that involves Māori students achieving academic success while maintaining and strengthening their cultural identity. The ideal of a strong cultural identity includes a large range of practices and ideas. One of these is the idea of time and the practices that cultural ideas of time suggest.

Notions of time are at the core of culture and yet, this aspect of culture is seldom considered in current education strategies for Māori. While it is relatively simple, on the surface, to desire educational success 'as Māori', to what extent can this be achieved in an educational environment where fundamental cultural assumptions – about time, social relationships, and use of space for example – are already and uncritically in place? I will argue that as time is integral to, and an expression of, culture and therefore significant to the possibilities for Māori learners succeeding 'as Māori', that educational ideal implies a far more fundamental shift in educational practices than was envisaged by the policy makers.

‘Māori enjoying and achieving education success as Māori’ is a complex ideal that goes beyond superficial ‘signs’ of culture. According to Durie (2003) it means being equally competent in *Te Ao Māori* and *Te Ao Whānui*. Becoming competent in *Te Ao Māori* has profound meaning for the education system and suggests that radical revisions of the existing system are required if the ideal is to be taken seriously. It suggests that *te reo Māori* and *tikanga Māori* will be experienced and practiced as an everyday part of school life and that teaching and learning practices will enable Māori learners to maintain and enhance their identity ‘as Māori’. Integrating *te reo Māori and tikanga Māori* into the school day and teaching in ways that validate Māori identity has implications for time, which is essential to the experience and practice of culture.

Societies are structured and organised on notions of time that are taken for granted, as though they are ‘objective fact’, but, as theorists have argued, time is a social construct (Harvey, 1990). Western time is a manifestation of the priorities in Western culture and society, and developed within the western world. In the modern western school system the use of time has been modelled on industrialism and the division of time into productive units (Harvey, 1990; Lefebvre & Regulier, 2003; Thompson, 1967). The New Zealand education system, as an expression of the western model, reflects these patterns. The school day is regulated by a fixed timetable, the curriculum is compartmentalised into units of time, schools educate children by age group, and a child’s progress is most likely to be benchmarked against time (as age).

The New Zealand education system, based on Western time, expresses Western culture. All children and teachers within this system consciously and unconsciously take up the cultural patterns and assumptions about time that underpin the system of education and schooling. This has profound consequences for Māori learners. Māori notions of time are gradually supplanted by Western time and Māori learners become assimilated into Western cultural frameworks of meaning. Knowledge, cultural practices and beliefs that are of value to Māori and constitute important aspects associated with Māori identity are eroded and become less and less meaningful.

When time as a fundamental aspect of culture is considered, ‘Māori enjoying and achieving education success as Māori’, starts to deconstruct and unravel. Viewed in

this light, Māori succeeding ‘as Māori’ offers a profound critique of the system. Jones (2007) contends “when *things do not add up* and *when they could never add up*. When they *cannot* and *could not* ‘make sense’ ... [t]hat ... is the generative ground for new ideas...” (p. 3). It is in the tension between two seemingly incompatible notions of time that I will explore the impossibilities and the possibilities for ‘Māori enjoying and achieving education success as Māori’. The impossibilities will allow us to critique the bold and apparently progressive ideals of the system. Exploring possibilities may lead us to discover rich ideas and innovative ways for thinking about education.

This research will take the example of time to explore the impossibilities and possibilities of ‘Māori enjoying and achieving education success as Māori’ and will be guided by the following questions: What are Māori notions of time and how do these compare with leading European theories of time? How are Māori notions of time an expression of, and integral to, Māori identity, *te reo Māori* and *tikanga Māori*? What becomes impossible and what are some possibilities for Māori identity, *te reo Māori* and *tikanga Māori* in English-medium schools when the underlying notions of time in which schools are based are in tension with Māori notions of time? What ideas and new ways of thinking about education can be advanced through this study?

The Ministry of Education's policy on Māori educational success

The phrase ‘Māori enjoying and achieving education success as Māori’ is a deeply complex statement. The two words ‘as Māori’, in particular underscore substantial changes for educating Māori learners. Durie (2003) introduced the goal ‘to live as Māori’ in his Framework for Education Advancement at the Hui Taumata Mātauranga in 2001, with the explanation that “education should be consistent with the goal of enabling Māori to live as Māori” (p. 199). Durie (2003) went on to say that, while *whānau* are primarily responsible for preparing youth to live as Māori, the education sector must also accept responsibility for preparing Māori learners to participate with confidence in *Te Ao Māori*. The point made by Durie was adopted by the Ministry of Education and formalised in the Māori education strategy *Ka Hikitia: Managing for*

Success (Ministry of Education, 2009). At that moment education was redefined for Māori learners and English-medium schools in particular, were left to grapple with the implications of *Ka Hikitia*.

There are two strategies for achieving the Ministry's priority outcome for Māori, the 'Māori Potential Approach' and 'Ako'. The Māori Potential Approach is the underlying philosophy of *Ka Hikitia* and advocates a shift in attitude toward Māori from deficit theorizing (Ministry of Education, 2009). The three principles of the Māori Potential Approach are: "all Māori learners have unlimited potential; all Māori learners have cultural advantage ... [and] all Māori learners are inherently capable of achieving success" (Ministry of Education, 2009, p. 19). The second strategy is 'Ako', which consists of two principles. The first principal urges teachers to foster constructive relationships with Māori learners and to provide quality teaching that reflects and enhances Māori identity, *te reo Māori and tikanga Māori*. The second principle of 'Ako' asks schools to engage with Māori in 'Productive Partnerships' and to acknowledge that Māori have a contribution to make to education and to value that contribution (Ministry of Education, 2009).

Māori identity, *te reo Māori* and *tikanga Māori* are significant to Māori in their personal lives and are therefore significant to Māori in their education (Ministry of Education, 2009). Furthermore, studies show that the achievement of Māori learners improves when their identity, *te reo Māori* and *tikanga Māori* are valued and integrated into the teaching and learning, and experienced as a normal part of daily education (Ministry of Education, 2013). This view is endorsed by leading Māori educators such as Bishop and Berryman (2006), Durie (2001) and Macfarlane (2000). Durie (2003) adds that education fails Māori learners when it fails to acknowledge Māori identity, *te reo Māori* and *tikanga Māori*. The Ministry states that schools and teachers can support Māori learners to succeed 'as Māori' by valuing and affirming their cultural identity.

The aim of this thesis is to critique the deep complexities of the statement 'Māori enjoying and achieving education success as Māori', from the perspective of time. Māori notions of time are therefore, the starting point of this thesis.

Overview of thesis

Māori notions of time

Chapter two presents a set of ideas about Māori notions of time that become the point of reference throughout this thesis.

When I embarked on this thesis, I had little understanding of Māori notions of time, other than that which I had experienced when I was at home on the *marae*. It was on the *marae*, which faces out to the Ruahine ranges, that I first became aware that my experience of time was different to time experienced in my everyday life, and it fascinated me. This awareness of time experienced on the *marae* has always remained with me and guided me as I researched Māori notions of time. However, trying to write about time was an entirely different matter. After all, how does one describe one's experience of time? While I had some knowledge through my 'lived' experience of Māori time, it was the theory of Māori time that I needed, for this thesis.

I began my exploration of Māori notions of time by analysing the creation narratives, in particular, cosmogenic whakapapa, *Ngā Kete o te Wānanga* and *pūrākau*. I felt that Māori notions of time could be ascertained by researching an original source of information such as the creation narratives because, as Hoskins (2001), points out "Māori epistemological and ontological frameworks derive from the creation narratives" (p. 5). The Māori creation narratives, as the name implies, depict the creation of the Universe, and therefore depict the nature of reality as observed and understood by Māori in traditional Māori society. It was not surprising, for example, to find that *Ngā Pō* or the nights of the moon, an important marker of time in traditional Māori society (and also in contemporary times), appear in the cosmogenic whakapapa as *Te Pō* or the Ages of Night and mark important creative events in the formation of the Universe. Confirmation, in my mind, that the creation narratives were indeed, a reflection of Māori lived reality

The first body of knowledge referred to in my research on Māori notions of time is cosmogenic *whakapapa*. Many of the cosmogenic *whakapapa* researched for this chapter begin with *Io*. Some describe as the Source of all Life; some as a Supreme

Being. It is important to point out however, that traditionally *Io* was not well known amongst Māori (Simpson, 1997; Buck, 1950; Hongi, 1920). On the other hand, Māori scholars such as Marsden, Pohatu and Robinson refer to *Io*. Pohatu, for example, described *Io* as ‘Latent Potentiality’ and in that sense I can appreciate that *Io* might be considered the source of all life as opposed to a Supreme Being (Pohatu, personal comment, September 13, 2010).

Variations of the cosmogenic *whakapapa* were and are held by different *iwi* (Buck, 1950; Salmond, 1985). The cosmogenic *whakapapa* chosen for this essay is based on *Io* and sourced principally from Reverend Maori Marsden. While I don’t necessarily subscribe to the *Io* school of thought, I chose Marsden’s cosmogenic *whakapapa* because Marsden depicts *Io* as the fertile ground (the root-cause) in which the seed of all life forms is sown and nurtured. It seems to me that this portrayal of creation is closely linked to what would have been observable by Māori in their natural habitat, that is to say, life is generated from and rooted in the earth or *Papatūānuku* and so depicts the nature of reality, as understood by Māori in traditional times.

Just as there are different versions of the cosmogenic *whakapapa*, so are there different interpretations of *Ngā Kete o te Wānanga*. My main source of information for *Ngā Kete o te Wānanga* was again Reverend Maori Marsden, and also Tuteira Pohatu, a Ngāti Porou *kaumātua*. *Ngā Kete o te Wānanga* are The Baskets of Knowledge which were obtained from *Io* and again relate to the origins of the Universe, and as such the origins of time in *Te Ao Mārama*.

Finally, I drew on *pūrākau* or traditional stories (some might say mythologies) about *Ranginui* and *Papatūānuku*, their offspring *Ngā Atua* and *Māui* for information about the nature of time in *Te Ao Mārama*. These *pūrākau* relate to the final preparations before *Te Ao Mārama* emerged as the Natural World and humankind was established in the world. For example, the sun, the moon, the stars were placed in the heavens as markers of time, and the seasons were ordered.

Māori notions of time and identity in Te Ao Mārama

My experience of time on the *marae* was different to my experience of time in my everyday life. As a young person however, I did not appreciate that these experiences

of time were fundamental to the cultural practices that took place on our *marae*. Nor did I understand that time was fundamental to my sense of belonging to, and affinity with the land, and to my association with *whānau*, *hapū* and *iwi*, that in fact, Māori notions of time were fundamental to my identity as a Māori.

Chapter three has two purposes: the first is to examine the essential role that Māori notions of time play in the formation of Māori identity and the second is to gain a more comprehensive understanding of Māori notions of time as they were lived and experienced in traditional Māori society. While I acknowledge that *te reo Māori* and *tikanga Māori* are important components of Māori identity, they are not my primary focus in this chapter, or indeed this thesis. Instead, I focus on Māori identity formation in relation to place and kin networks.

Traditionally (and also in modern times), Māori children were bonded with the land. When a child was born, the *whenua* (placenta) and the *pito* (section of the umbilical cord) were taken and placed in *Papatūānuku*. The bond with the land was more significant in a sense than the bond with parents, as children were raised by their community (Pohatu, personal communication, 13 September, 2010). In traditional times, the identity of the child, as highlighted in this cultural practice, was constituted in relation to the land and the child's extended family network. Over time and through Māori notions of time, the bond with the land and kin networks was strengthened and formed an essential feature of Māori identity.

In modern times Māori continue to identify with the land and kin networks. I argue that Māori notions of time are fundamental to living 'as Māori' and are therefore integral to Māori identity formation. Time is a necessary consideration if schools are to support Māori learners to achieve education success, and maintain and enhance their identity 'as Māori'. As Durie (2001) explains "a secure identity demands more than a superficial knowledge of tribal tradition. It depends on easy access to the Māori world – especially Māori language, the extended family network and customary land" (p. 55). Māori notions of time are essential to Māori identity formation, and this requires schools to think about time in different ways.

Western notions of time and education

Schools have not always been required to validate Māori identity, *te reo Māori* and *tikanga Māori* or to prepare Māori learners to participate with confidence in *Te Ao Māori*. In fact, as Penetito (2010) points out “Māori education, beginning in the native schools and in an unbroken sequence to today, has traditionally and currently been used by the state as a mechanism of cultural control rather than for educative purposes” (p. 21). Rather than endorse Māori identity, *te reo Māori* and *tikanga Māori*, successive education policies have sought to assimilate and marginalise Māori (Smith, 2000). Māori identity, *te reo Māori* and *tikanga Māori* have for the most part been ignored in an education system that has centred and acclaimed the superiority of Western cultural values, to the detriment of Māori cultural values (Smith, 1999).

It is difficult to think about schools in the way Foucault (1991) describes them – politically driven machineries of power structured through the operation of the timetable to break down and remake individuals into practiced and docile bodies. Idealistically, we think of schools as creative, educational environments where children learn and grow and discover possibilities for their lives.

Chapter four traces the historical sources of Western time in New Zealand schools in order to gain an understanding of, and to illustrate, some of the ideologies that have shaped and influenced Western notions of time. The ideologies and beliefs about Western time, relating back to the time of Aristotle and Plato coalesced at the time of the industrial revolution. One of the purposes of schools established at that time was to prepare the children of working-class families to work in the factories. The linear, abstract, quantified timetable was adopted as the means for disciplining and controlling learners. Time became a hidden part of the curriculum structured, as Foucault (1991) asserts, to break down the innate time of the learner and to produce a practiced and docile body, fit for working in the factories.

Time in New Zealand schools reflects and fosters Western cultural ideals. The principle means of organising time and learning in New Zealand schools is the timetable, inherited from the British education system. This chapter highlights how the structure and uses of time in New Zealand schools are instrumental in relocating Māori learners within Western frameworks of meaning. The Ministry of Education (2010) states, “to support every Māori learner to achieve to their full potential as

Māori we need an education system that captures and reflects that identity, *te reo Māori and tikanga Māori* are essential ingredients for all learners and critical to the success of Māori learners in education” (p. 24). This statement overlooks the nature of time in New Zealand schools and its use as a hidden part of the curriculum to control and acculturate Māori learners into Western frameworks of meaning.

Please note: In this chapter I draw some conclusions about time use in schools and these are written as italicised paragraphs. My study is not one that researches school processes closely – these conclusions about time use in schools come from my own observations and knowledge. In future research I (or others) can devote detailed research time to the analysis of time in schools.

Wā and Māori Education

Chapter five explores the relationship between *wā*, traditional Māori educational practices and Māori identity formation, and contrasts these with time and educational practices in New Zealand schools. While time in New Zealand schools operate to assimilate Māori learners into Western cultural frameworks, Māori identity, *te reo Māori* and *tikanga Māori* were affirmed on a daily basis in traditional Māori educational practices.

Wā is cyclical, relative, qualitative and dynamic and so was learning in traditional Māori educational settings. Young children learned about their natural environment and about their extended family networks from a close relative, usually a *hākui* or a *koroua*. In this teaching/learning dynamic there was a fine balance between sharing knowledge, guiding the learner and allowing the learner to discover knowledge for himself/herself. Learning took place in context and through doing, and both the teacher and the learner were physically, mentally, emotionally and intuitively engaged in the teaching/learning process. Teaching and learning was not fixed but occurred as the opportunity arose.

What Becomes Impossible and Possible

Succeeding ‘as Māori’ cannot be merely learning about Māori identity, *te reo Māori* and *tikanga Māori* at scheduled times as an abstract exercise and in an ad hoc fashion. Durie (2001) states “a secure [Māori] identity demands more than a superficial

knowledge of tribal tradition. It depends on easy access to the Māori world – especially Māori language, the extended family network and customary land” (p. 55). Furthermore, cultural identity develops over time through opportunities to experience and express culture in day-to-day living.

Chapter six highlights the restricted nature of the opportunities for Māori learners to achieve education success while maintaining and enhancing their identity as Māori in schools organised on Western time. These restrictions have led some educators to attempt a new model for education that reflects aspects of cyclical, relative, qualitative and dynamic *wā*. These are exciting developments for Māori education and two of these schools: Tai Wānanga and Te Whānau o Tupuranga are featured in this chapter. In these schools time is flexible, learning and teaching is a shared experience, and takes place in contexts that are both traditional and contemporary. In these schools, Māori identity is affirmed on a daily basis.

Please note: Some of the observations I make in this chapter and others are in relation to positions that I have held as te reo Māori facilitator and a Te Kotahitanga facilitator.

Chapter two: Māori notions of time

Word list: cosmogenic *whakapapa* (creation genealogy); *Hine-ahu-one* (the female form); *Hine-nui-te Pō* (the Goddess of Death); *Hine-titama* (the Dawn Maid); *hui* (gatherings); *Io-taketake* (creator or root-cause); *Io* (Latent Potentiality); *Io-io-whenua* (the Founder of Natural Cycles); *kaumātua* (respected elders); *mātauranga Māori* (Māori epistemology); *Mokomoko Kākāriki* (Green Lizard); *Ngā Atua* (the Forces of Nature; the offspring of *Ranginui* and *Papatūānuku*); *Ngā Kete o te Wānanga* (the Baskets of Knowledge); *Ngā Rangi* (a reference to the Heavens); *pōwhiri* (official welcoming ceremonies); *pūrākau* (traditional stories); *Ranginui* and *Papatūānuku* (the Primordial Parents); *Rarohenga* (the Underworld); *Rongo mā Tāne* and *Haumia tiketike* (Cultivated and Uncultivated Food); *Tāne* (one of the principal *Atua* or Forces of Nature); *Tāne* (Sun, Light, Fire) ; *Tangaroa* (Sea, Water); *tauparapara* (invocation); *Tāwhirimatea* (Wind, Air); *Te Ao Mārama* (the Natural World); *Te Kore* and *Te Pō* (Void Abyss Night); *Te Pō* (the Ages of Night); *te reo Māori* (Māori language); *tikanga Māori* (Māori culture); *Tūmataunga* (War); *tupuna* (ancestor); *tūpuna* (ancestors); *wairua* (spirits); *whakapapa* (genealogy).

Introduction

Situating the work

Māori notions of time are the starting point and the cornerstone of this critique of the Ministry of Education’s strategy for Māori student achievement, ‘Māori enjoying and achieving education success as Māori’ (Ministry of Education, 2012). Durie (2003) suggests that achieving ‘as Māori’ means Māori learners will have access to the Māori world so that they can learn about their identity, *te reo Māori* and *tikanga Māori* – thus enabling them to operate comfortably in that world – as well as achieving in the non-Māori world. It is my contention that Māori notions of time are reflected in, and underpin Māori identity, *tikanga Māori*, and *te reo Māori* and before we can seriously consider the possibilities for ‘Māori enjoying and achieving education success as Māori’, we must first have at least some understanding of Māori notions of time.

This chapter seeks to explore the question, ‘What are Māori notions of time?’ This is a question not easily answered, because Māori time is no longer apparent in day-to-

day life. In addition, Western time has begun to encroach on *pōwhiri* and other traditional *hui*. To satisfy this question and to provide a context within which Māori ideas about time can be examined, I turned to a body of knowledge referred to as *mātauranga Māori*, which originated in the metaphysical realm. Such knowledge is expressed through the Māori creation narratives (Hoskins, 2001; Marsden, 1992; Nepe, 1991). These narratives refer to the conception of the universe and the primal genealogies of *Te Ao Mārama*. They form the knowledge base upon which the infrastructure of Māori society was, and continues to be, framed. It is my assertion that time, as understood and practised by Māori, can be more fully conceptualised with further exploration of the creation narratives.

The purpose of this chapter is to research and present a set of ideas about Māori notions of time that can be developed and referred to in the ensuing chapters. To this end, and to provide a framework for this chapter, attention will be directed to the following three categories of creation narrative:

- cosmogenic *whakapapa*, which sets out the stages of the creation of the universe as in a genealogy;
- *Ngā Kete o te Wānanga*, which contain detailed information about the creation of life and the universe; and
- *pūrākau*, specifically those stories associated with *Ranginui* and *Papatūānuku* and their offspring *Ngā Atua*, who appear in the last stages of the creation of the universe, and who are instrumental in creating *Te Ao Mārama*; and finally, one of the stories about Māui, an ancient ancestor who lived in the very early period of *Te Ao Mārama* (Buck, 1950).

These creation narratives span the period from the conception of the universe to its realization as *Te Ao Mārama*. For each of these three categories of creation narrative, I make a statement about Māori notions of time, followed by an explanation supporting or justifying that statement.

The creation narratives

Creation narratives, such as cosmogenic *whakapapa* and *pūrākau*, were a means of presenting complex ideas that were difficult to define – for example, theories of time.

Theories on their own are not sufficient for understanding time because, as Adam (2004) points out, time is both theory and a “lived orientation and material expression” (p. 2). To overcome the difficulty of conveying complex ideas, Māori developed different forms of symbolic storytelling, encoded with complex concepts and multiple layers of meaning, as a way of apprehending and portraying what they perceived to be their ultimate reality (Marsden, 1992). In this chapter, I will elaborate on connections between time and Māori creation narratives, drawing out underlying beliefs or theories that I consider to be relevant to time.

The sources of information for the creation narratives

To broaden and consolidate my personal understanding of Māori theories related to time, extensive research has been essential. The works of the following prominent authors are some of the many readings that I have examined as I learn more about Māori time: Sir Peter Buck, *The Coming of the Māori* (1950); Anne Salmond, ‘Ontological Quarrels: Indigeneity, Exclusion and Citizenship in a Relational World’ (n.d.) and *Between worlds: Early exchanges between Maori and Europeans 1773-1815* (1997); Te Whatahoro, *The lore of the whare-wānanga: teachings of the Maori college on religion, cosmogony, and history* (translated by Percy Smith in 1913), (1998); Joan Metge, *Rautahi: The Māori of New Zealand* (1976); Samuel Robinson, *Tohunga: The Revival: Ancient Knowledge for the Modern Era* (2005); and, less known but of considerable interest, Hare Hongi, *The Gods of Māori worship: Sons of Light* (1920).

Equally important in my quest for information about Māori time was the inclusion of organic knowledge – knowledge gathered as a result of dialogue with *kaumātua*. Conversations with Ngāti Porou *kaumātua* and long-serving educationalist, Tuteira Pohatu, have been instrumental in testing and developing my understanding of pre-European Māori theories about time.

Notwithstanding the aforementioned, it was the work of Reverend Māori Marsden, *The Woven Universe: Selected Writings of Rev. Māori Marsden* (2003), and *God, Man and Universe: A Māori View* (1992) that I drew on to provide a whakapapa setting out the conception of the universe and the place of time in that whakapapa.

Cosmogenic whakapapa

Cosmogenic *whakapapa* provide an important first insight into Māori ideas about time, namely - *time exists in relation to a creative event. I suggest this indicates that for Māori, time is relative and qualitative.*

Cosmogenic *whakapapa* sets out the stages of the universe's creation and the relationship between humankind, *Ngā Atua* and all life in *Te Ao Mārama*. As Barlow (1991) explains, “whakapapa is the genealogical descent of all living things from the gods to the present time” (p. 173). The following cosmogenic *whakapapa*, provided by Reverend Maori Marsden, begins with *Io-taketake* (creator or root-cause) and ends with Heaven Earth (the Natural World), hereafter referred to as *Te Ao Mārama*. Please note, *Io-taketake* also appears later in this chapter in his function as *Io* (Latent Potentiality) and *Io-io-whenua* (the Founder of Natural Cycles):

Io-taketake, creator, root-cause
|
Void Abyss Night
|
Shoot Taproot Laterals Rhizome Hair root
|
Seeking Pursuit Extension Expansion Energy
|
Primordial Memory, Deep Mind
|
Sub-conscious wisdom
|
Seed-word Breath of Life
|
Shape Form
|
Time Space
|

Heaven Earth (The Natural World)

(Marsden, n.d. quoted in Royal, 2003, pp. 31-32)

The cosmogenic *whakapapa* portrayed above illustrates major periods in the creation of the universe. *Io Taketake* is the root-cause and seed-bed of the cosmos, providing fertile ground from which the seed - the root foundation - of all life forms will generate and evolve, eventually manifesting in *Te Ao Mārama*. Sustaining each stage of creation is primal energy. As each evolutionary stage reaches its optimal state, a primal surge of power (rhythmic patterns of energy) carries the creative impulse forward to the next stage of development (Marsden, n.d. quoted in Royal, 2003).

This dynamic unfolding of life takes place in the cosmic space-time continuum of *Te Kore* and *Te Pō*, the realm of Becoming or Potentiality (Marsden, 1992). *Te Pō* represents time as the Ages of Night and has various designations, each of which are significant, for example:

Te Po-tipu	The night of growth
Te Po-rea	The night of development
Te Po-tahuri-atu	The night of extension
Te Po-tahuri-mai	The night of retraction
Te Po-puta	The night of revealing
Te Po-whawha	The night of holding
Te Po-Namunamu-ki-Taiao	The night of seeking passage to the revealed world
Te Po-Tahuri-mai-ki-Taiao	The night of turning towards the revealed world

(Robinson, 2005, p. 20)

Each evolutionary stage in the creation of the universe is defined by the nature of that evolutionary stage or creative event. Likewise time, represented by each of the *Pō*, is dedicated to, and defined by, the nature of that creative event. I conclude therefore that time for Māori is relative to a creative event and, because time is defined by the nature of that event, time is also qualitative. I would venture to add that where there is no creative event, there is no time, that is, a state of timelessness exists.

Ngā Kete o te Wānanga

The body of knowledge found in *Ngā Kete o te Wānanga* contains important ideas about the way Māori view and understand time: *Every period or stage of creation in Te Kore and Te Pō, the realm of Becoming or Potentiality is sustained by rhythmic patterns of energy – and time, as we know it in Te Ao Mārama, arises out of these rhythms or energies. I suggest that, for Māori, time is in every feature of creation and is therefore not only relative and qualitative, but also dynamic.*

Ngā Kete o te Wānanga are referred to in an ancient *tauparapara*, which describes the ascent of *Tāne* to the furthestmost of the esoteric realms, *Te Rangi-tū-hā-hā*. In his ascent, *Tāne* came upon *Io* (Latent Potentiality) and was given three baskets of knowledge: *Te Kete Tū-a-uri*, *Te Kete Tū-ātea* and *Te Kete Aronui*. These baskets relate to the creation of life, the creation of the cosmos and the creation of *Te Ao Mārama* (Pohatu, personal comment, September 13, 2010). For the purpose of this thesis, we will focus on *Te Kete Tū-a-uri* and *Te Kete Tū- ātea*.

Rhythm and time

Te Kete Tū-a-uri contains knowledge about the rhythmic patterns of energy that initiate and sustain creation in *Te Kore* and *Te Pō*, the realm of Becoming or Potentiality (Marsden, 1992; Salmond, 1997). Marsden (1992) describes these rhythmic patterns of energy as: *Mauri*, *Hihiri*, *Mauri-Ora* and *Hau-Ora*. Each of these energies occurs at different stages in the evolutionary process, representing a refining of energy as creation unfolds. *Mauri* occurs in the early stages of creation and interpenetrates all things. *Mauri* has a binding effect. *Hihiri* is a refined form of *Mauri*, and facilitates the development of conscious mind. *Mauri-Ora* is a refinement of *Hihiri*, and *Hau-Ora* is the breath or wind of the spirit, animating all life forms including objects and people.

The knowledge contained in *Te Kete Tū- ātea* relates to the formation of space and time in *Te Ao Mārama*, which arises out of *Hau-Ora*, the breath or wind of the spirit. According to Marsden (1992) when *Hau-Ora* was infused into the realm of *Te Kore* and *Te Pō*, the realm of Becoming or Potentiality, *Ranginui* and *Papatūānuku* and their offspring *Ngā Atua* were brought into existence. Marsden (1992) refers to this

creative process as follows, “Te Hauora begat shape; shape begat form; form begat space; space begat time; and time begat Rangī[nui] and Papa[tūānuku]” (p. 9). The *Hau-Ora* rhythm or energy generates shape, form, space and time, out of which *Ranginui and Papatūānuku* arose, signalling the beginning of *Te Ao Mārama*, the Natural World or the realm of material being.

The rhythmic patterns described by Marsden (1992) as *Mauri, Hihiri, Mauri-Ora* and *Hau-Ora* initiate and sustain creation in *Te Kore* and *Te Pō*, the realm of Becoming, Potentiality. These same rhythmic patterns give rise to time in *Te Ao Mārama* and so we can infer that time is associated with rhythm. Just as each creative stage or event in *Te Kore* and *Te Pō* is initiated and sustained by rhythm, so too is time, referred to as *Te Pō*, initiated and sustained over the period of each creative event. Rhythm, through all its permutations in *Te Kore* and *Te Pō*, becomes time in *Te Ao Mārama* and is manifest in every life form in *Te Ao Mārama* – each of which, therefore, has its own internal sense of rhythm or time. I conclude then, that because time is in every feature of creation in *Te Ao Mārama* and each feature of creation has its own innate sense of time, time for Māori is dynamic.

Pūrākau 1 – Ranginui and Papatūānuku

The stories about *Ranginui* and *Papatūānuku* are considered to be very ancient. They relate to the final stages of *Te Pō*, from which *Te Ao Mārama* emerges (Buck, 1950). The following stories, I contend, contain an important insight into the way Māori view time: ***Time in Te Ao Mārama is cyclical and the sun, the moon and the stars are the orchestrators of cyclical time.***

Confined between *Ranginui* and *Papatūānuku*, within *Te Pō*, *Ngā Atua* became aware of their cramped conditions. Various solutions were discussed as to how they might end their confinement. A quarrel ensued but, in the end, the task fell to *Tāne* to separate *Ranginui* and *Papatūānuku*. Lifting *Ranginui* high above *Papatūānuku*, *Ngā Atua* beheld for the first time “the ancient glimmer of light at the break of dawn” (Robinson, 2005, p.25). As *Ranginui* was held suspended above *Papatūānuku*, *Tāne* established the twelve heavens, referred to as *Ngā Rangi*, and *Papatūānuku* became established as Mother Earth (Te Whatahoro, 1998). By separating *Ranginui* and

Papatūānuku, *Tāne* brought to an end the ages of *Te Pō* and ushered in a new era – *Te Ao Mārama*.

The important markers of time: The sun, the moon, the stars and the seasons

Because *Te Ao Mārama* was so poorly lit, *Tāne*, whose symbol is the Sun, went in search of light. He placed the sun in the sky to shine by day, and the moon in the evening sky to shine by night. To compensate for the softer light of the moon, *Tāne* placed the stars in the heavens, alongside the moon (Buck, 1950). The sun, the moon and the stars, once set on their respective courses, became the regulators of the rhythms and cycles of all life in *Te Ao Mārama*. *Tāne* was regarded as one of the most important children of Heaven and Earth, because he brought light, essential to life in *Te Ao Mārama* (Hongi, 1920).

Some of *Ngā Atua* harboured resentment toward *Tāne* (Sun, Light, Fire) for separating *Ranginui* and *Papatūānuku*. The ensuing war between *Ngā Atua* resulted in the seasons, regulated by the movements of the sun, the moon and the stars in *Te Ao Mārama*. *Tāwhirimātea*, who did not agree to the separation, took revenge on his brothers *Tāne* and *Tangaroa*. *Rongo mā Tāne* and *Haumia tiketike* fled from *Tāwhirimātea* and took refuge within *Papatūānuku*. *Tangaroa* attacked *Tāne* and, in turn, *Tūmataua* vented his rage on his brothers. Adam (2004) states it is “in the interplay between sun/fire and water, the two primary sources of life, the rhythm of the seasons is created” (p. 7). It was *Io-io-whenua* who eventually brought the fighting between the brothers to an end. *Io-io-whenua* means that a natural cycle established itself over the earth, and so the seasons – spring, summer, autumn and winter – and the corresponding growth cycles of all vegetation were established in *Te Ao Mārama* (Robinson, 2005).

The creation of mankind: Mortality is introduced

When *Tāne* ascended to the topmost heaven *Te Rangi-tū-hā-hā* (referred to in *Ngā Kete o te Wānanga*), he was searching for that which had not yet been created: namely, human life (Pohatu, personal comment, September 13, 2010). After receiving *Ngā Kete o te Wānanga*, *Tāne* returned to *Te Ao Mārama* whereupon he and his siblings set about fashioning the human form. *Hine-ahu-one* was fashioned from the sacred earth at *Kurawaka* by *Tāne*, *Tangaroa*, *Tāwhirimātea* and the other *Atua*, who all contributed to the form and character of *Hine-ahu-one* (Pohatu, personal comment,

September 13, 2010). *Tāne* procreated with *Hine-ahu-one*, and *Hine-titama*, the first human being, was born. *Tāne* then procreated with *Hine-titama*, and their daughters became the progenitors of mankind.

When *Hine-titama* realized that *Tāne* was both her husband and her father, she was consumed with shame. Fleeing *Tāne*, she journeyed to the end of the earth where she began her descent into *Rarohenga*. *Tāne* pursued her, but she admonished him, telling him to return to their family and care for them in the world – saying, “until emaciation and failure of health bring them to me, I will catch the ‘living spirit’” (Te Whatahoro, 1998, p. 146). Thus *Hine-titama* became *Hine-nui-te Pō* who draws the souls of mankind to *Te Pō* (a reference to the Underworld) at the conclusion of their lives. Death or mortality was therefore introduced into *Te Ao Mārama*.

Pūrākau 2 – Māui

Māui, an ancient *tupuna* living in the early period of *Te Ao Mārama*, and renowned for his provocative and challenging behaviour, attempted to overcome death for mankind. He waited until *Hine-nui-te-Pō* was asleep and, turning himself into a *Mokomoko Kākāriki*, *Māui* attempted to enter the passage to *Hine-nui-te-Pō*'s womb. *Pīwaiwaka*, the fantail, who was witness to this extraordinary spectacle, could not contain his laughter, causing *Hine-nui-te-Pō* to awaken and crush *Māui* (or more to the point, *Mokomoko Kākāriki*) between her thighs (Pohatu, personal comment, September 13, 2010). *Māui*'s attempt to secure immortality for mankind failed and so the path of death was established, forever drawing the souls of mankind towards *Hine-nui-te-Pō* and *Rarohenga* (Robinson, 2005). The cycle of life and death was now established in *Te Ao Mārama*.

The cyclical nature of time in Te Ao Mārama

The story about *Tāne*, *Hine-titama* and *Hine-nui-te-Pō* is a metaphor for the cyclical nature of life and death in *Te Ao Mārama*. The sun rises in the morning when *Tāne* gives rise to *Hine-titama*. The sun traverses the sky, when *Hine-titama* flees and *Tāne* pursues her (Te Whatahoro, 1998). And, at the close of day, the sun sets when *Hine-titama* becomes *Hine-nui-te-Pō* and descends in to *Rarohenga*. The rising and setting of the sun regulates the rhythms of life and all that lives. All things are born, have form and unfold their nature. According to Robinson (2005), *Hine-nui-te-Pō* “is said

to let time pass and causes things to age” (p. 130). As a consequence, time passes, the ageing process occurs and, at the conclusion of life, just as *Hine-titama* becomes *Hine nui-te-Pō*, form is relinquished, and the spirit descends into *Rarohenga* (*Te Pō* is also a reference to the Underworld).

The universe is not a closed system

With the formation of *Te Ao Mārama*, two contrasting realms now exist:

1. the invisible realms – *Te Kore* and *Te Pō*, the realm of Becoming, Potentiality, and *Ngā Rangī*; and
2. the material realm - *Te Ao Mārama*.

The invisible realms and the material realm are contrasting but interconnecting realms and there is constant interplay between the two. This highlights, I believe, two important ideas about time in *Te Ao Mārama*: ***Time in Te Ao Mārama is characterized by finite time and timelessness.***

Māori understand that the cycle of life and death is a feature of *Te Ao Mārama* but that death is something of an illusion. The sun sets in the evening, but rises again each morning, and so death is not final. As Metge (1976) explains, Hine nui-te-Pō was not only the Goddess of Death, but also the Goddess of Conception and Childbirth. *Te Pō* was “a womb in which new life was generated out of death, the realm not only of endings but also of new beginnings” (p. 56). There is a constant flow between the invisible realms and the material realm as the *wairua* of the departed return to the invisible realms, and that, which is in the process of ‘becoming’ ascends to the material realm or *Te Ao Mārama* (Marsden, 1992). Life and death are constantly occurring, and life in the material world is sustained from the invisible realms of *Te Kore* and *Te Pō*.

Taking the idea of the interchange between the invisible and material realms a step further, Pohatu emphasises that

In former times the invisible realms and the material realm were not referred to as different realms; they were viewed as different states of the same realm –

just as tapu and noa are one in the same, just as day and night are contrasting states of the same world. (Personal comment, September 13, 2010)

Salmond (2011) elaborates on this idea, pointing out that Māori view reality as an “unbounded whole”, where boundaries are thresholds, not impermeable dividers (p. 9). *Hine-titama* is *Hine-nui-te-Pō*, one and the same – albeit contrasting states of the same being. Thus life and death, the material and the non-material, are alternating states. The material is a manifestation of the non-material; when it fails, it reverts to its non-material state. Life is conceived; it goes forth into the world of being, but at the end of its physical life, it always reverts to its origins or source.

Two states of time exist in *Te Ao Mārama*: finite time and timelessness

Two realities exist in the Māori world: the invisible realms, which transcend time and space (Metge, 1976); and the material realm of *Te Ao Mārama*, in which life and death are constantly occurring. The invisible realms and *Te Ao Mārama* are interconnected (Salmond, 2011). Because the invisible realms transcend time and space, I suggest the invisible realms can be thought of as timeless. Time in *Te Ao Mārama* on the other hand is cyclical. Life takes form, time passes and death occurs. When death occurs, form is relinquished and the spirit returns to *Rarohenga*, where the cycle of life and death begins again (Metge, 1976). Time in this sense is also timeless. However, the life and death of any given being occurs within a contained but unspecified period of time and so I conclude that there are two states of time in *Te Ao Mārama*: finite time and timelessness.

Conclusion

The aim of this chapter was to discern Māori notions of time from the creation narratives, which form part of the body of knowledge referred to as *mātauranga Māori*. Three sets of ideas about the way Māori perceive time have been noted:

Time in *Te Ao Mārama* is relative, qualitative and dynamic

The first set of ideas about time is drawn from cosmogenic *whakapapa* and *Ngā Kete o te Wānanga*:

Cosmogenic *whakapapa* and *Ngā Kete o te Wānanga* depict the origins of the universe as a series of evolutionary or creative stages that take place in the Space - Time continuum of *Te Kore* and *Te Pō*. Time is represented as a series of *Pō*, each of which relates to, and is defined by, a specific creative event in the process of creation. The duration of each *Pō* is determined by the nature of the event itself and the proper fulfilment of that event. Time is therefore relative to that creative event and because it is defined by, or describes that event, time is also qualitative.

The creation of the universe is initiated and sustained by rhythmic patterns of energy referred to as *Mauri*, *Hihiri*, *Mauri-Ora* and *Hau-Ora*. These rhythms occur at different stages as creation progresses. According to Marsden (1992), time has its own *whakapapa* arising out of the *Hau Ora* rhythm. Rhythm takes form as time in *Te Ao Mārama* and is manifested in and through every form of life in the *Te Ao Mārama*. Time for Maori, is therefore dynamic.

Time in *Te Ao Mārama* is cyclical and the sun, the moon and the stars are the orchestrators of the cycles

The second set of insights about the way Māori perceive time is found in *pūrākau* about *Ranginui* and *Papatūānuku* and *Maui*. These stories relate to the last stages in the creation of the universe when *Te Ao Mārama* emergence:

Two important events occurred during this period, which determined the nature of time in *Te Ao Mārama*. Firstly, *Tāne*, whose symbol is the sun, placed the sun, the moon and the stars in the heavens to give light and life to *Papatūānuku*. Secondly, *Tāne* created the first human being, *Hine-titama*. The story about *Tāne* and *Hine-titama* who becomes *Hine-nui-Te Pō* is on the one hand a story about the creation of mankind and mortality, and at the same time a reference to the movement of the sun as it rises in the morning, moves across the sky and sets in the evening. Interweaving the creation of mankind with the cyclical movements of the sun is not only a reference to the cyclical nature of life and death in *Te Ao Mārama* but also to the importance of the sun, the moon and the stars as the great orchestrators of time.

Time in *Te Ao Mārama* is characterized by finite time and timelessness

The third set of ideas about time relates to the cyclical nature of life and death in *Te Ao Mārama*.

While time in *Te Ao Mārama* is cyclical, the timeless dimension of the invisible realms also exists in *Te Ao Mārama*. Reality, according to Māori, consists of two complementary realms, the invisible realms and *Te Ao Mārama*. These realms are not separate entities but contrasting states of an unbounded whole. There is a constant flow between the invisible realms and *Te Ao Mārama* as life and death occurs, and in this sense time in *Te Ao Mārama* is timeless. However, life occurs within a contained but unspecified period of time and so time in *Te Ao Mārama* is distinguished by finite time, and timelessness.

The next chapter will show how these concepts about time, as depicted in the creation narratives, are represented in traditional Māori society as a ‘lived reality’ and how these notions of time are integral to the formation of Māori identity.

Chapter three: Māori notions of time and identity in *Te Ao Mārama*

Word list: *ariki* (paramount chief); *hapū* (sub-tribe); *hau* (characteristic essence); *iwi* (tribe); *kanohi ki te kanohi* (face-to-face); *maara* (garden); *mana* (authority); *Matariki* (the Pleiades); *mauri* (dynamic life force); *Ngā Atua* (the Forces of Nature); *ngā marama* (the moons); *ngā pō* (the nights); *ngā wāhanga* (the seasons); *Papatuanuku* (Earth Mother); *pou* (carved posts); *pōwhiri* (official welcoming ceremony); *pūrākau* (traditional stories); *Ranginui* (Sky Father); *rohe* (region); *taonga tuku iho* (treasured legacy); *tangata whenua* (people of the land); *tapu* (sanctity); *Te Ao Māori* (the Māori world); *Te Ao Mārama* (the Natural World); *Te Ao Whānui* (the wider world); *te reo Māori* (Māori language); *tikanga Māori* (Māori culture); *tohunga* (priest); *tuakana/teina* (older more knowledgeable sibling/younger less expert sibling); *tūpuna* (ancestors); *utu* (balance and reciprocity); *wā* (Māori notions of time); *whakapapa* (genealogy); *whakawhanaungatanga* (creating and maintaining relationships); *whānau* (extended family); *whanaungatanga* (relationship, kinship, connection); *whare whakairo* (carved meeting house).

Introduction

Situating the work

In the previous chapter I put forward theories about the way Māori understand time in *Te Ao Mārama* based on an analysis of the creation narratives. These theories are as follows: time in *Te Ao Mārama* is cyclical and the sun, the moon and the stars are the orchestrators of cyclical time; time in *Te Ao Mārama* is relative, and therefore also qualitative and dynamic; and finally, two contrasting states of time exist in *Te Ao Mārama*: contained but unspecified periods of time, and timelessness. These theories about time will form the basis of my argument that Māori notions of time are central to living ‘as Māori’ and are therefore integral to Māori identity, *tikanga Māori*, and *te reo Māori*.

Ka Hikitia, the Ministry of Education’s strategy for ‘Māori enjoying and achieving education success as Māori’, asserts that opportunities to learn about and experience

Māori identity, *tikanga Māori* and *te reo Māori* are significant to Māori learners and are the necessary platform from which to succeed in education and *Te Ao Whānui* (Ministry of Education, 2009); Ministry of Education, 2013). Durie (2003) endorses the importance of a secure identity to Māori well-being, but adds that Māori learners need meaningful contact with *te reo* and *tikanga Māori* and meaningful opportunities to learn about Māori identity. Concentrating on time and identity formation as an example, I argue that Māori notions of time are integral to the formation of Māori identity, and that the aspirations proposed in *Ka Hikitia* cannot be fully appreciated in New Zealand schools without considering the relationship between time and identity.

This chapter will show that Māori notions of time constitute a framework of meaning for Māori and, as such, have implications for New Zealand schools if the Ministry of Education is serious about providing meaningful environments that support Māori learners and the formation of Māori identity. The aims of this chapter are: to consolidate and extend our understanding of Māori theories of time by looking at time as it was experienced in traditional Māori life; to gain an appreciation for the essential role that Māori notions of time play in the formation of identity and in Māori students feeling confident in *Te Ao Māori*; and finally, to present some possibilities for Māori perspectives on time in New Zealand schools, and the opportunities that might arise as a result for Māori learners' education and indeed all learners.

This discussion will be guided by the following questions, which will form the overall structure of this chapter: How is Māori identity constituted? How are Māori notions of time integral to Māori identity? What does this tell us about distinctive Māori approaches to time in *Te Ao Mārama*? What are some implications for 'Māori enjoying and achieving education success as Māori'?

Māori identity

Whanaungatanga

The concept of *whanaungatanga* is the key to understanding Māori identity. Whanaungatanga is powerfully expressed in the creation narratives as noted by Durie (1998) when he stated, "in creation beliefs Māori descend from the earth mother and sky father and through them have genealogical connections to all living things" (p.

49). Not only do Māori see themselves in relation to all living things, Māori also see themselves as participants in creation (Rangihau, 1992). Essential to this belief in the connectedness of all life and the responsibility these relationships engender is *whanaungatanga*. *Whanaungatanga* defines the way Māori understand the world and the way Māori relate to their world (Royal, 2005). If the universe is perceived as a unified system of multiple world dimensions, then Māori identity ultimately rests in its connection to that unified whole (Salmond, 2011).

While Māori enjoy and identify with many aspects of *Te Ao Whānui*, they continue to declare their genealogical connection to all living things through *pepeha*, a stylised form of introduction. For instance,

Ko Ruahine te maunga	Ruahine is the mountain
Ko Manawatū te awa	Manawatū is the river
Ko Rangitāne te tangata	Rangitāne is the founding ancestor
Ko Rangitāne te iwi	Rangitāne is the tribe
Ko Ngāti Mutu-ahi te hapū	Ngāti Mutu-ahi is the sub-tribe
Ko Makirikiri te marae	Makirikiri is the marae.

In this *pepeha* the speaker makes a claim about his/her genealogical relationship with a particular place (through prominent landmarks), and people (through a founding *tupuna* or ancestor and associated tribal networks). As shown here, *pepeha* are an affirmation of Māori identity, which is primarily constituted in relation to place and tribal networks (henceforth referred to as kin networks).

Māori notions of time and Māori identity

It is my view that Māori learners cannot begin to understand fundamental connections to place and kin networks, the sources of Māori identity, without an understanding of Māori notions of time. What part then, does time play in the formation of Māori identity? This question will be answered in two parts: time and identity with place; and time and identity with kin networks. In both parts I present a very traditional model of Māori life in order to fully explore the relationship with place and the

significance of kin networks. The first part will focus our attention on Māori notions of time and identity with place.

Māori notions of time and identity with place

In former times (and to some extent now), each *hapū* developed a relationship with the *rohe* they inhabited (Collier, 2009) through their understanding of time as it occurred in the natural environment. Economic activity was central to the organization of traditional Māori life (Firth, 1929; Reeves, 1899). As Metge (1976) explained, “the whole of Maori life was firmly based on an annual cycle of food-getting” (p. 10). The well-being and survival of each *hapū* was contingent upon their intimate acquaintance with their natural surroundings. Indicators of time were in nature’s cycles and informed Māori when to hunt and fish, and when to plant and harvest food. The accumulation of empirical knowledge, through time as it occurred in the *rohe* Māori inhabited, and Māori belief in the connectedness of all life led to an enduring relationship with the land.

Qualitative time: the relationship with place

The expressions used by Māori to denote time in day-to-day living informed Māori about the natural environment they inhabited. One of the principle divisions of time in *Te Ao Mārama* is *ngā marama* (Best, 1922). The following is an example taken from a list of *marama* supplied to Best (1922) by Tutakangahau, a Tuhoe elder, “PIPIRI. Kua pipiri ngā mea katoa i te whenua i te matao, me te tangata. All things on earth cohere owing to the cold; likewise man” (p. 15). All *marama*, as in the example provided, have proper names and describe the conditions occurring in nature during that particular *marama*, highlighting that Māori time is qualitative. When Māori refer to *ngā marama* they are not only indicators of time, but also sources of information about the conditions and the changes occurring in nature.

The expressions that denote time were not only sources of information but also a reminder of the relationship Māori have with their environment. Each *marama* is divided into a system of *pō* and the names of each *pō* correspond to the phases of the moon. For example, *Tirea*, the second night of the moon “is when ‘feeble radiance of moon seen’” (Best, 1959, quoted in Roberts, Weko & Clarke, 2006, p. 9). Moreover,

ngā pō were characterised according to conditions appropriate for securing food. Best (1922) noted “the Maori husbandman planted his sweet potatoes during the Otane and Orongonui phases of the moon, thus showing that he recognised the powers of sun and moon in connection with the growth of crops” (p. 5). These practices varied from *hapū* to *hapū*, as each *hapū* interpreted the phases of the moon in relation to the land they inhabited. The relationship each *hapū* developed with the land was informed by the indicators of time, in this case the phases of the moon, and the correlation between time and place.

Wā

The Ōtāne and Ōrongonui phases of the moon were indicators of time (or *wā*) in which sweet potatoes were planted. *Wā* is the underlying concept that explains Māori time in *Te Ao Mārama*. Although *wā* is often translated as ‘time’, it does not mean ‘time’ in the Western sense (Pohatu, personal comment, September 13, 2010). Referring to *wā*, Johansen (1954) stated, “its most important function is that of containing definite events” (p. 153), for example, the planting of sweet potatoes. The *wā* for planting sweet potato was initiated by the Ōtāne and Ōrongonui phases of the moon and the activity was sustained during this period. However, when the conditions appropriate for planting kumara ceased, the activity ceased, *wā* ceased; timelessness resumed. To paraphrase Metge (1976) *wā* stops and starts in relation to nature’s cycles, which determined when food gathering and cultivation occurred.

***Wā* is relative: responding to nature’s cycles**

Each *hapū* was part of an intricate ecosystem, keeping time with the movement of the sun, the moon and the stars, which in turn directed the rhythms (timing) of all other life forms in their region. The most significant of the stars was *Matariki* (Collier, 2009; Best, 1922). The advent of *Matariki* signalled the beginning of the Māori year, which was greeted with emotion and celebration (Best, 1922). Collier (2009) commented, “it was at this time that my uncle laid out the new maara with a mathematical precision based on a knowledge system that preceded Galileo’s discourse on the relationship of the moon and the tides” (p. 13). It is clear from this account that Māori had a very intimate knowledge of their environment. It is also clear that Māori time is not fixed, nor abstracted from the natural world, but relative to the changes occurring in nature. The appearance of *Matariki* set in motion a

sequence of events and Māori, who were not just part of nature but “were nature” (Pohatu, personal comment, September 13, 2010), responded in turn by preparing for the new cycle of planting and harvesting.

***Wā* is dynamic: living in accord with the natural environment**

Māori lived their lives in concert with nature’s cycles to the extent that their lives were interwoven with that of their natural surroundings, adjusting and responding as nature’s cycles dictated. Sadlier, as cited in Collier (2009), illustrates this point in the following quote:

When Puanga shone brightest of Te Huihui o Matariki (the assembly of the Pleiades) we knew that the soil was beginning to warm up. When that happened the trees began to flower and that flowering was the symbol for sowing and fertilising your seeds. It was also a symbol that certain shellfish were in prime condition. There were other stars attached to Ranginui’s cloak ... that indicated when to sow specific seeds at that time. Tauroru ... and Whakuahu ... would appear and we put in the potatoes and corn. When the maara were all bedded down, we waited for the appearance of Autahi ... She was the main star for navigating to the fishing grounds offshore. (p. 14)

This account reiterates the notion that time was located in every feature of creation, and time was understood by Māori as dynamic and a symphony of that connectedness. It is also apparent that Māori identity was embedded in the region they inhabited through their understanding of time as it occurred in nature in their day-to-day lives.

***Wā*: preserving the relationship with the land**

Māori existed in a symbiotic relationship with their natural environment (Hoskins, 2001), taking food or resources, only when the time or signs in nature were propitious to ensure that the *mauri* of each species was maintained. The use of resources, however, was not just a matter of sustainability and survival. The primary emphasis was on maintaining an appropriate relationship with the resource in question and the land as a whole (Salmond, 2011; Durie, 1998; Rangihau, 1992). Intrinsic to each life form in *Te Ao Mārama*, is *mauri*, a dynamic life force, which generates ‘vigour,

impetus and potentiality’ (Durie, 2001). Durie (2001) adds, “the mauri of one object retains its momentum not because of its intrinsic qualities alone but because of its relationship with the mauri of others” (p. x). Māori were aware of this dynamic and were constantly negotiating relationships and endeavouring to preserve *utu* within their natural environment (Salmond, 1997) through their observation of time in nature.

It is not enough, then, to say that Māori identify with their natural environment. *Papatūānuku* and *Ranginui* were the primordial parents and all life, including man, originated from *Papatūānuku* and *Ranginui* through *Ngā Atua*. In a world that was understood as relational, the principal consideration for Māori was the relationship with the natural environment and the land, not purely for sustainability but to ensure that the ‘vigour, impetus and potentiality’ of the land was preserved. For Māori, time had meaning relative to the changes occurring in nature. Through their observation and knowledge of nature’s cycles in their respective regions, and their adherence to those cycles, Māori upheld their relationship with the land as co-creators and participants in life. The land and the natural environment therefore, necessarily formed an essential feature of the Māori psyche and identity.

Wā and identity with kin networks

The first part of this section demonstrated that Māori developed an intimate relationship with the *rohe* they inhabited through their understanding of time as it occurred in the land. Equally important to Māori identity is kin networks. The second part of this section looks at three important sources of identity with kin networks: *iwi*; *tūpuna*; the past. I argue that *wā* facilitates the connection with *iwi*, *tūpuna* and the past, all of which are fundamental to Māori identity.

Wā is the key to the past

Wā is cyclical and this is the key to understanding the relationship Māori have with the past. The movement of the sun, the orchestrator of cyclical time in *Te Ao Mārama* conveys the notion that the past does not precede the present; the past exists in parallel with the present (Binney, 1987). Soutar (1991) clarifies this point with the following analogy:

Time was like a balloon with a vast array of spots painted on it being steadily blown up. One spot representing the individual, the others representing past events. As time passes, the balloon continues to expand. As more events occur additional spots appear on the surface of the balloon. Regardless of the degree of expansion of the balloon, the spots never disappear. They continue to surround the individual. (pp. 78-79)

Looking down upon Soutar's balloon, one can appreciate the fine line between the present and the past, as all events are stored in the mind. One can also appreciate, given Soutar's model, that the past is very much part of the present for Māori. The future also has its presence in this arrangement and is informed by the past and the present (Soutar, 1991).

Wā and identity with iwi

In Māori thinking, timeframes entwine the past including the realms of *Ngā Atua*, the present and the future. Māori believe that the past exists in parallel with the present and that the invisible and the material realms, contrasting states of an unbounded whole, are interconnected (Salmond, 2011). As a consequence Māori perceive their lives within the greater life of the *iwi*. Whereas Māori acknowledge and nurture individuality, "Māori see the individual as part of the group, his life and death as part of an on-going life that outlasts his" (Metge, 1976, p. 57). Māori identity is understood within the context of the *whānau*, which is incorporated into larger and multiple *hapū* and *iwi* networks.

The past is not disconnected from the present but gives context to the identity of the *iwi* and its members. Soutar (1991), quoting a speech about the early nineteenth century Ngā Puhi raids against Ngāti Porou, illustrates this point:

He pu! He pu!	O' the musket! O' the musket!
Na te pu i mate ai au	T'was by the musket that I
a Ngati Porou i a Ngapuhi	Ngati Porou was killed by Ngapuhi
Mehemea he taiaha ki te	If it had been with traditional
taiaha	weapons

Kaore i mate au

I would not have been defeated. (p. 82)

This speech was made in 1982 and the speaker places himself in the context of the event, as if he was personally there, which of course he was not. This highlights an important belief about *wā*: in between defined events the passage of time does not exist (the notion of timelessness). It is evident in this speech that *iwi* are an important source of identity for Māori. It is also evident that the past can be called into the present and experienced as though the passage of time does not exist.

Wā and identity with tūpuna

Because timeframes encompass the past, including the invisible realms, the identity of the *iwi* and its members is associated with those *tūpuna* who have gone before (Salmond, 1997). This sense of connection to *tūpuna* was captured in an interview with Hohepa Kereopa, a Tuhoe *tohunga*. Kereopa (n.d. quoted in Moon, 2003) explained:

I was weaving a kete. And this old tohunga took me into another world. He said that to start off a kete, you have a knot, to start off the weaving, and each strap represents man. So you get them and you plait them on to the three-way plait. And that's the journey through life. Now, imagine a long plait, with the fibres all bound together, and yet the leaves of the flax strands have withered away. Those are our ancestors who have passed on, yet they are still tied on to the rope of man, all the way back to your creator – to the knot at the beginning. (p. 47)

Tūpuna are woven into the fabric of the *iwi*, and into the lives of their descendants. As such, *tūpuna* are not confined to the past, but are considered to be ever present and continually engaged with the living (Metge, 1976).

When Māori refer to their *tūpuna* and important events in history, it is as if the passage of time disappears (the notion of timelessness applies) (Soutar, 1991). The extent to which Māori identify with their *tūpuna* is highlighted by Johansen (1954) who states, “ancestors lived on in the history of kinship groups and as such their lives

were the same as those of the living” (p. 161). Johansen illustrated this point with the following story, which has been paraphrased below:

Kupe, a revered ancestor, is credited as being one of the earliest explorers to voyage to New Zealand from Hawaiki (mythical homeland). When Turi wanted to travel to New Zealand, he asked Kupe to accompany him. Kupe replied ‘e hoki a Kupe?’ or ‘should Kupe return?’ indicating that he had no intention of returning to New Zealand. Several generations later a young woman named Puhihuia abandoned her husband to elope with her lover. Her people implored her to return to her husband, to which Puhihuia responded ‘e hoki a Kupe?’ (Johansen, 1954, p. 163)

This was a precarious situation for Puhihuia and her people, as her actions might have resulted in a dispute. However in recalling Kupe and this event, the passage of time was eliminated as the past was brought to bear in the present. Puhihuia, by invoking her ancestor Kupe, took on his persona and *mana* and, in so doing, conveyed her resolve that she would not be returning to her husband. The reference to Kupe was understood and the matter concluded.

The story of Puhihuia illustrates the point that Māori identity is linked to that of their *tūpuna*. However, Puhihuia was not just identifying with Kupe in a figurative sense she was identifying with him in a literal sense. As Salmond (1997) explains “when rangatira spoke of their ancestors as ‘ahau’, or ‘I’, it was because they were the ‘living face’ of those ancestors” (p. 176). Rangatira were bound to their *tūpuna* and to their kin groups, through their descent lines, and as such they shared the *hau* of their *tūpuna*. Salmond (1997) continues, “the hau, like the tapu and mana of the ancestors, was at once dispersed throughout the kin group and exemplified in its aristocratic leaders” (p. 176). All members of the *iwi* who descend from Kupe are united under Kupe’s *tapu*, *mana* and *hau*, despite the passage of time.

Māori believe that the space-time divide can be suspended, opening the way for *tūpuna* like Kupe to interact with their descendants in *Te Ao Mārama* (Salmond, 1997). Māori ontology is represented in *whakapapa*, describing a relational world in which all life is connected through *Ngā Atua* (Hoskins, 2001). Through these

whakapapa networks, interpenetration between the invisible realms and the material realm is possible. The boundaries between these realms are in fact thresholds through which exchange can occur (Salmond, 1997). Through the “utilisation of faculties and intelligences of a ‘higher order’, Māori could perceive, access and communicate” with their *tūpuna* across the space-time divide (Hoskins, 2001, p. 11), allowing *tūpuna* to have a presence in the life of the *iwi* and its members (Salmond, 1997).

Wā and identity with the past

Wā* is relative: indicators of *wā* are references to *tūpuna

Whakapapa contain important information about *tūpuna* and the past, and these entries serve as indicators of *wā*. *Whakapapa* is both a record of descent lines from founding *tūpuna*, and a reference to historical events in the life of the *iwi* (Pohatu, personal comment, September 13, 2010). The following narrative provided by Grace (1959) is paraphrased here to demonstrate this point:

Pataatai Horonuku Te Heuheu Tukino IV was an eminent Ngāti Tūwharetoa ariki (paramount chief). His names denote important periods in the history of the Ngāti Tūwharetoa people. Born Pataatai, he was the high-ranking son of the then ariki Mananui Tukino II. Pataatai acquired the name Horonuku (landslide) when his parents were killed, along with other members of the tribe, in a devastating landslide in 1846. When Horonuku succeeded his uncle as the ariki of Ngāti Tūwharetoa in 1862, he assumed the title Te Heuheu Tukino IV. This title not only commemorates his succession to the position of ariki, but also those ariki before him who bore this distinguished title. (pp. 458-459)

These three names stand as *pou* in a timeless universe and point to important events in history for Ngāti Tūwharetoa. Each member of the *iwi* at that time and thereafter was and is able to locate themselves and their personal *whakapapa* and histories in relation to their ancestor Pataatai Horonuku Te Heuheu Tukino IV.

***Wā* is dynamic: there is a continuous dialectic between the past and the present**

The past is an important source of information and identity for *Māori*. *Māori* relied on

the past to apprehend the present and to steer a course into the future. The ease of access to the past facilitates a continuous dialectic between the past and the present, as the past is relived and reinterpreted in the present (Binney, 1987). Soutar (1991) offers the following account to demonstrate this point:

When Mohi described the conflict between Tuwhakairiora and Ngiti Ruanuku, he chose not to see the war itself as the primary event, but to look beyond the war to the deeper issues which brought it to being. This involved a focus on events which had occurred generations before the war. Events which were difficult to separate out and place accurately in chronological order, let alone on a single time line. (pp. 79-80)

To understand the present (and the consequences for the future), Mohi was able to locate the seemingly unrelated past events, laying them out so the conflict could be reviewed in its entirety. In this way, a lasting resolution could be attempted. Past events, stored in the mind are easily retrieved and ordered to show their relationship and relevance to the present.

While events in the past were referred to as indicators of *wā*, the time of an event (in the Western sense) is not fixed but takes its measure from the significance of the event and its relationship to other events (Soutar, 1991). As in all aspects of *Te Ao Māori*, the relationship is key. It is the relationship between events and the people involved that enjoys ontological primacy for *Māori*, not the event itself or the time in which the event occurred (Salmond, 2011; Soutar, 1991). When historical events are retained in the mind, as in Soutar's balloon model, they are easily recalled and examined. According to their meaning and their relationship to other events, the sequence of events can be arranged and re-arranged to fully apprehend a situation or an issue.

Relative, qualitative and dynamic *wā* unlocks the door to the past

When *whakapapa* and the past are stored in the mind, and this is the principal reference to history, time becomes relative, qualitative and dynamic. Take the historical events cited above in relation to Ngāti Tūwharetoa. These momentous occasions – the birth of Pataatai, the landslide, and the succession of Horonuku to

ariki - became important reference points in time. In former times, and even today, if the question was posed ‘when did such and such occur?’ the response might be ‘*i te wā i a Horonuku*’ ‘in the time of Horonuku’ (Soutar, 1991). This does not locate the event chronologically, which would be meaningless to Māori. Instead the time of the event in question is located in relation to another significant event or person, and from there, connections are made. History can be referenced and cross-referenced providing far more detail than dates and numbers. A tapestry of history starts to emerge and, in this way, personal accounts and stories that are important to the identity of the tribe and its members are relived and retained in the mind for future generations.

Nature provided Māori with the inspiration for conceptualising *wā* in relation to the past. *Wā* is relative to *tūpuna* and events in the past and is therefore qualitative and dynamic. Notwithstanding the important role that relative, qualitative and dynamic *wā* play in identity formation with *iwi*, *tūpuna*, and the past, it is cyclical *wā* that provides the key to understanding the relationship Māori have with the past. The following interrelated notions about the past arise out of cyclical *wā*: the past exists in parallel with the present; timeframes entwine the past, including the realms of *Ngā Atua*, the present and the future; and a state of timelessness exists in between defined events.

The past exists in parallel to the present and is retained in the minds of Māori, and so the past is not remote but is ever accessible. Timeframes entwine the past, the present and the future and so Māori identity is constituted in relation to *iwi*, prominent *tūpuna* and important events in the history of the *iwi*. *Tūpuna* and events in history are indicators of *wā* and also references to knowledge, history, cultural practices, language and kinship ties, all of which are important in the formation of Māori identity. Because a state of timelessness exists in between important events, the past, which exists in parallel with the present, is easily called into the present. The ease of access to the past, and the ability to order events as the occasion demands, facilitates a continuous dialectic between the past and the present. The way is open to constructing a view of the past that is rich with meaning and possibilities for Māori and Māori identity in the present.

Distinctive Māori approaches to time

At the beginning of this chapter I stated that Māori identity is constituted in relation to place and kin networks. I went on to show the connection between Māori notions of time and the formation of Māori identity. Through this exploration of time and identity formation, it is now possible to draw further conclusions about distinctive Māori approaches to time in *Te Ao Mārama*.

Wā exists in relation to a defined event or wā doesn't exist at all

Wā exists within a defined context, and is dedicated to, and defined by, the purpose of that context. Outside of that context or those parameters, *wā* does not exist (the notion of timelessness). Essentially, nature provided Māori with the framework for conceptualising *wā*. *Wā* is relative to nature's cycles and nature gave form or substance to *wā*. In keeping with this model, Māori also gave substance to *wā*, in the form of priorities. For example, procuring food was a priority and gave pattern to *wā*. While the conditions occurring in nature were favourable, the activity continued, but when the conditions were no longer favourable, the activity ceased, *wā* ceased. *Tūpuna* and events in history were important sources of information and identity and gave substance to *wā*. When *wā* doesn't have substance, *wā* does not exist. As Metge (1976) would say, *wā* stops and starts.

Māori have a personal relationship with wā

Wā is relative to nature's cycles, prominent *tūpuna* and events in history. *Wā* is relative to nature as it occurred in the *rohe* inhabited by each *hapū*. As a result, each *hapū* formed a personal relationship with *wā*, living their lives in concert with nature's cycles as they transpired in their *rohe*. *Wā* is also relative to people, in particular *tūpuna* and important events in history. Reference to *tūpuna* and events in history, as indicators of *wā*, means that *wā* is not only specific to each *hapū* and *iwi*, but also to each *whānau*. Traditionally *wā* was experienced and understood by *whānau*, *hapū* and *iwi* within a personal and relevant context.

Māori invest in wā

Wā is given to those principles or practices that are of value to Māori. Horticulture and food gathering were a priority to Māori, as was maintaining a relationship with

the land. Māori preserved the *mauri* of the land and the natural environment by observing the appropriate *wā* for taking food. In so doing, Māori lived in accord with their natural environment and were co-creators in life. Survival was also dependent on keeping social relations strong because Māori were necessarily a communal society. Well-being was, and continues to be, derived from belonging to and participating in community affairs. The expression *kanohi ki te kanohi*, or face-to-face, conveys the importance of active participation in community affairs. Whether the focus was on the land or people, the emphasis was, and still is, on *whakawhanaungatanga*. Preserving a relationship with the land and kin groups was not only a priority for day-to-day survival but, more importantly, for the holistic well-being of the communities and the environments in which Māori lived.

Māori engage with *wā*

Māori are interested in the qualities associated with *wā* and these qualities, conveyed in the expressions used by Māori to denote *wā*, are a feature of *wā* and give form to *wā*. *Wā* is associated with certain conditions occurring in nature. For example, the appearance of *Matariki* signalled the beginning of a new cycle of planting and harvesting. Māori looked, and waited, for *Matariki* to appear and made predictions about the coming season based on their observation of the stars. This was the *wā* for thanksgiving and celebration, but also the *wā* for reflecting on past seasons and preparing for the season to come. The appearance of *Matariki* initiates the *wā* for celebration, reflection and planning for the upcoming horticultural season, and so gives structure, meaning and value to *wā*. Māori engage with *wā* by observing and acknowledging the characteristic signs in nature and responding accordingly.

Māori also engage with *wā* through their *tūpuna* and events in history. Great emphasis was placed on *tūpuna* and the past, for Māori derived meaning from their *tūpuna* and the past as a guide for the present and the future. Māori are interested in the details contained in their histories and the characteristics of their *tūpuna*. By valuing these details and characteristics, Māori activate and create connections (exchanges) with their *tūpuna* and their histories, thus giving meaning and substance to *wā*. Māori engage with *wā*, by valuing and making connections to their *tūpuna* and the past through those qualities and details that are perceived, interpreted and experienced in and through *wā*.

***Wā* is not fixed and so life is understood as fluid and contingent**

Wā is not fixed but is relative to nature and dynamic, and so life is understood as fluid and contingent rather than predictable. Horticulture and food gathering were a priority for survival and Māori were ready to respond as and when the conditions were auspicious. Social commitments were also a priority and similarly required a level of responsiveness and adaptability. Flexibility was a necessity and Māori were habituated into a disposition that made them ready to accommodate and respond to others, or opportunities as they arose. *Wā* is dynamic and Māori managed their lives to allow for its contingent nature.

Wā is not fixed and Māori were adept at perceiving the indicators of *wā* as they occurred in nature. Procuring food was a constant necessity, as was maintaining a relationship with the land. Māori looked for, and anticipated, the signs that indicated the most appropriate *wā* for gathering or cultivating food. Observation and listening skills were highly valued and became highly developed. Māori learned to observe, to read, to hear and to interpret nature's signals and were attuned to natural rhythms, their own rhythms, as well as those of their natural surroundings. Māori developed awareness and sensitivity toward the subtle nuances or messages conveyed in nature and natural phenomena.

***Tūpuna* and the past are significant in the lives of Māori**

Wā is cyclical and the basis from which Māori derive their understanding of the past. The past exists in parallel with the present and so timeframes interlink the past with the present and the future. The life and identity of an individual is constituted within the context of the *iwi*. *Iwi* are associated with prominent *tūpuna*, and these *tūpuna* and the past are significant in the lives of Māori. In a universe that is perceived to be timeless, *tūpuna* and important historical events act as indicators of *wā* and signposts, which inform the present and the future. *Tūpuna* and important historical events are not confined to the past, but are retained in the minds of Māori and, as such, exist in the present and are accessible, as required. When Māori recall *tūpuna* or past events, it is as though the passage of time does not exist (the notion of timelessness). *Tūpuna* and the past, which give meaning and context to the present, can be called into the present and experienced in a very personal way.

Looking at time as it was experienced in traditional Māori life has allowed us to consolidate our understanding of Māori notions of time or *wā* and draw some conclusions about distinctive Māori approaches to time. In traditional times *wā* was integral to living as Māori and through *wā* Māori formed a secure sense of their identity in relation to place and kin networks.

Wā and 'Māori enjoying and achieving education success as Māori'

The Ministry of Education (2009) states that schools play a vital role in supporting Māori learners to achieve education success and maintain and enhance their identity as Māori. What educational opportunities then, can schools provide Māori learners that endorse Māori identity, *te reo Māori* and *tikanga Māori*?

Schools are not obliged to teach *te reo Māori*, and even if there is a willingness to teach *te reo Māori*, in my experience as a facilitator providing *te reo Māori* professional development to schools, there is a lack of teachers who are proficient in *te reo Māori* and can teach *te reo Māori*. There is also a lack of teachers who have knowledge of *tikanga* and can support schools to integrate *tikanga Māori* into school practices. The issues surrounding teaching and integrating *te reo Māori* and *tikanga Māori* notwithstanding, these are both essential to Māori identity, and it is important for schools to address these issues.

But are *te reo Māori* and *tikanga Māori* sufficient to developing a secure identity as Māori? This chapter has highlighted that *wā* is essential to living as Māori. Māori continue to identify with place and their extended family networks and so if Māori learners are to succeed as Māori, they need opportunities to learn about, experience and practise *wā*.

What opportunities are there for Māori learners to learn about the past, as understood by Maori? For example, timeframes entwine the past, the present and the future. Māori are not disconnected from their past, but are located in their past and in relation to the future. Māori learners gain an understanding of their own identity in relation to

their *whānau*, *hapū* and *iwi*, by knowing about their *tūpuna* and associated histories. Understanding and experiencing *wā* in relation to the past is important to identity formation.

What opportunities are there for Māori learners to learn in contexts that reflect cyclical, relative, qualitative and dynamic *wā*? *Wā* is relative to nature's cycles and Māori developed a unity with their natural habitat through their experience of nature's cycles. Māori dedicated themselves to understanding and following the protocols of the land, and made connections to, and interacted with, the land on a daily basis, through their observance of *wā*. Understanding and experiencing *wā* as it relates to the natural world is also important to identity formation.

Conclusion

Wā is integral to living as Māori and is instrumental in Māori identity formation. *Wā* therefore needs to be a consideration if Māori learners are to succeed as Māori.

The next chapter will focus on time in New Zealand schools and examine the relationship between time and Western identity formation.

Chapter four: Western notions of time and education

Introduction

Situating the Work

The purpose of the previous chapter was to demonstrate the fundamental relationship between *wā* (Māori notions of time) and the formation of Māori identity. Essentially, Māori identity or personhood is formed from an understanding of a social self primarily constituted in relationship, before birth, with place and kin. Chapter three established that there is an explicit connection between *wā* and the intimate association Māori have with their ancestral lands and kin networks. *Wā* is instrumental and therefore critical in the formation of Māori identity.

Time and identity are again the subject of this chapter as we continue to explore the possibilities for Māori learners achieving education success ‘as Māori’ in New Zealand schools, which are structured on Western ideals, including Western notions of time. If *wā* (Māori notions of time) is explicitly linked to Māori identity formation, we can assume that Western time is similarly linked to Western identity formation. In this chapter I argue that time in New Zealand schools – particularly English medium schools – reflects, and serves to foster, Western identity formation, and is instrumental in reconstituting and relocating Māori within Western frameworks of meaning. Time in schools thereby limits meaningful opportunities for Māori to learn about their cultural identity.

This chapter will look at the historical influences on time in New Zealand schools, to demonstrate how time (naturally) operates to endorse Western cultural identity formation over Māori cultural identity formation. The first section will explore the sources of Western time in New Zealand schools in order to achieve the following: to gain an understanding of Western notions of time; to provide a point of comparison with Māori notions of time (to be taken up in chapter five); and to show the ideologies that have shaped Western time. These ideologies are inherent in Western time and, I maintain, are transmitted through the expression and practice of time in New Zealand schools. The second section will look at the structure and uses of time in New Zealand schools and demonstrate how time functions to promote and nurture the

beliefs and values inherent in Western society. The second section of this chapter will allow us to consider the actual and authentic possibilities for Māori learning about their cultural identity.

This chapter will be guided by the following two questions: What are the historical influences that have shaped Western time? How do Western notions of time function in New Zealand schools to reflect and nurture Western beliefs and values and therefore Western identity formation? These questions will form the overall framework of this chapter.

The historical influences that have shaped time

Time is a socio-historic construct (Adam, 1995; Frank, 2011; Harvey, 1990) and the time that is experienced and practised in New Zealand schools has its origins deep within Western history. New Zealand schools are characterised by clock time and temporal rule-frames that regulate school life and learning. Clock time, which is a feature of the Western world, is only possible because time has been conceived and constructed in a particular way; that is to say, as abstract, standardised, linear, and quantitative (Adam, 1995). While these concepts of time are considered to be relatively recent, the nature of time has been debated by philosophers, scientists and theologians throughout history (Frank, 2011). The purpose of this section is to trace the development of Western time, which has come to represent time in New Zealand schools. How did abstract, standardised, quantified, linear time come about and what ideals and values are associated with these particular beliefs about time?

Nature's rhythms versus abstract time

Mythological beginnings

In contrast to the mechanical regimens of clock time in modern schools, ancient beliefs of all peoples about time were founded upon nature's rhythms that are the basis of humankind's implicit understanding of time (Adam, 2004). In Western traditions of thought, engagement with time can be traced back to the Stone Age in Europe, and mythologies from this period indicate that time was relative to nature. The sun, the moon and the stars – portrayed in cosmic mythologies about Sky Gods –

were the source of time for hunter-gatherer societies (Frank, 2011). As humans started to occupy permanent settlements and farm the land, the Earth became the focus, generating new mythologies about Mother Earth. The commencement of the agrarian year, the seasons, and the phases of the moon consequently became the main indicators of time. It is from this physical encounter with time that nature's rhythms became deeply embedded in the physiology of humankind (Adam, 2004); and it is this intuitive orientation to time that is in tension with the abstracted, standardised, quantified, linear time of schools.

The abstraction of time from nature

The abstraction of time as something separate from nature, an idea essential to the advent of clock time in schools, has been traced to the development of writing and standardised units of measurement. These two developments occurred during the emergence of cities and the associated growth in trade. Writing had its beginnings around 4,000 BCE in the cities of Sumer (now known as Southern Iraq) through a system of clay tokens that “were used to represent ... a day's work or a basket of wheat” (Frank, 2011, p. 30). Sets of tokens were packaged and impressions made on the wrappers to indicate the number of tokens enclosed. The tokens eventually became redundant and the markings alone came to represent a measure of a worker's time spent on a task. Time as number had exchange value and could be traded as a commodity. By recording labour time externally, through a system of markings or writing, human kind had begun to conceptualise time as a separate property of the natural world and to conceive of time as number.

As with writing, standardised units of measure came about in response to the expansion of commerce. A standard was necessary for measuring the weight of goods being traded. In order to develop a standardised measurement, physical objects had to be abstracted. The weight that was experienced was transformed into the “weight that could be conceptualized” (Frank, 2011, p. 31). These developments – the abstraction of weight and standardised measurement – represented important cognitive innovations for humankind. The same thought processes that enabled humans to create a standardised system of measurement and conceptualise weight as a number, would eventually be extended to time.

Calendars and clocks – standardised, abstract time

The Julian calendar, the predecessor to the Gregorian or Western calendar, around which the school year is structured, was established during the time of the Roman Empire. In 46 BCE Julius Caesar initiated wide-ranging temporal reforms and the Julian calendar became the standard (Frank, 2011). Although accurate calendars based on the agrarian year pre-dated the Julian calendar, the Julian calendar was based on the solar cycle rather than the lunar cycles. The effect of a standardised calendar, however, was to remove cosmic time from its natural context, re-instating it in written form.

There was little advancement in Western timekeeping between the advent of the Julian calendar in 46 BCE and the mechanical clock in the 14th century, which would come to regulate daily life and learning in schools (Frank, 2011). In European cities, prior to the clock, bells regulated activity, for example, “a bell signal for the markets, a bell signal for the guilds” (Frank, 2011, p. 72). Over time, and with the expansion of cities, the bell system became inadequate. In 1370, a well-constructed mechanical clock was installed in Paris (Mumford, 1935). By 1393, church clocks and public clocks had been installed in many European cities and large market towns (Frank, 2011; Thompson, 1967). With the clock came the hour, twelve for the day and twelve for the night. The minute, however, would not appear until the seventeenth century (Harvey, 1990). Bells, which initially signalled the hour, were eventually replaced by the clock dial and hand (Mumford, 1935). Time in cities became standardised and life became regulated by the clock and the hour.

The invention of the mechanical clock changed people’s conception of time and the way people engaged with time. The clock brought two cognitive innovations into play: the representation of time as a number (an abstraction of time as something external to nature) and the standardised measurement of time. Abstract, standardised, measured time had become a daily reality in cities. People began to arrange their lives in relation to the clock; time could be fixed and meetings, events and work times scheduled against the hour. As Mumford (1935) noted, abstract or clock time had become “the new medium of existence” (p. 17). On this smaller scale, the stage was set for the clock and synchronised time to come into prominence, precipitated by the European Industrial Revolution.

The following trends and ideologies inherent in calendar and clock time, over time, increasingly characterised Western society: the standardised calendar and clock replaced local calendars and time, and regulated people's time; time became quantified, and as such, fixed and measured; and quantitative time became more important than qualitative time.

These trends and ideologies became manifest in New Zealand schools in the following ways: time in schools became associated with, and regulated, by number (clock time). The time that is uniquely inherent in each learner was replaced by a regulated timetable - all learners came to be expected to conform to a standardised time frame; time, which is inherently associated with creation, was used to re-define reality based on clock and calendar time; and time lost its organic, creative value

Greek philosophers and quantified time

Before we get to schools, and even before we proceed to the Industrial Revolution, let us return to the period of the Greek philosophers Pythagoras, Plato and Aristotle, to a source of some of the fundamental tenets upon which Western time, and therefore time in schools, is based (McGinnis, 2003). Notwithstanding that my reference to Pythagoras is brief, Pythagoras made a significant contribution to the time we live in the Western world, in that he argued “[t]he structure of the world must be understood through numbers” (King, 2004, p.15). This mathematical influence on both Plato and Plato's student Aristotle can be seen in their theories on time and number (Farndell, 2010; von Leyden, 1964). While Plato and Aristotle lived around 400 BCE, the theories they advanced about time – time and number are associated with order; time is a type of motion or an ‘unfolding of being’; time is linear; time can be measured; and time can be divided into equal spatial units – are evident in the time structures that operate in schools (including New Zealand schools) today.

Time and number are associated with order

Plato advanced the notion, adopted by Western society and evident in schools, that time and number are associated with the creation of order (von Leyden, 1964). Influenced by Pythagoras' belief that the world could be explained mathematically, Plato was the first of the Greek philosophers to define time in terms of number

(Farndell, 2010; von Leyden, 1964). Plato believed that time came into existence when the heavens were ordered and, as a consequence the natural world came into being (von Leyden, 1964). The heavens, Plato insisted, “revolve according to number”, and so implicit in his idea of time is a ‘standard of measurement’ or number (von Leyden, 1964, p. 39). The standard measurement Plato referred to was the motion of the sun and the moon, against which time, Plato argued, could be measured, and in relation to which all life is staged (McGinnis, 2003). When the sun and the moon were set upon their orbits, “all natural processes ... [were] assigned a time”, their coming into being and subsequent passing away orchestrated by the ever-repeating cycles of the sun and the moon (McGinnis, 2003, p. 87). Thus time became inherently connected to number, and brought order to the natural world or the world of ‘becoming’.

Plato’s notions of time and the inherent trends and ideologies gradually gained prominence in Western society. Time became associated with: creating order, with value being placed on order, control and discipline; the process of ‘coming into being’, with importance being placed on progress and continual growth, and the need to constantly strive to do better; a standard measurement, which can be measured numerically or quantified.

These ideologies became manifest in New Zealand schools in the following ways: precise timetables and structured daily routines are used to impose order and control over learners and teachers in schools. Punctuality and keeping to time are the rule; the abstract framework of timetables has become the point of reference for learning. Teachers and learners have become timekeepers as opposed to co-creators in the process of learning. Learners are servants to time in their learning as opposed to exploring the possibilities for creating their own personal realities over and through time; learners are under pressure to ‘achieve their potential’ through learning; progress is assessed/ measured against a predetermined standard over time. Progress is not considered valid if it cannot be measured numerically (scientifically). Intelligence, knowledge and learning are assessed against a (Western) standard.

Time is linear and can be divided into quantifiable units of time

Aristotle provided us with linear time, the source of the timetable and the means for establishing order in schools. Aristotle did not share Plato's belief that time came into existence when God created the natural world. Instead, Aristotle asserted that time had always existed and, as such, time has an underlying "continuous, linear structure, with neither a beginning nor an end" (White, 1989, p. 207). Nor did Aristotle believe that time was a type of motion, but determined through observation, that time was a measure of motion, for example, the measure of the movement of the sun across the sky. Accordingly, Aristotle imagined time to be like a line and that 'a time' could be defined by a prior 'now' and a posterior 'now' (McGinnis, 2003). Time, concluded Aristotle, was linear and could be divided into quantifiable spatial units, which were "temporally repeatable", for example, a period of thirty minutes or an hour (White, p. 208). We know that 'a time' has elapsed, Aristotle argued, when there is a definite 'before' and 'after', and change has occurred (McGinnis, 2003).

The following is a summary of Aristotle's notions of time and the associated trends and ideologies that increasingly gained prominence in Western society. Time is linear (unidirectional and continuous). The past, the present and the future proceed in a straight line, flowing one into the other, however the past, the present and the future are viewed as distinct entities; time can be divided into equal spatial units - time is discontinuous. Linear time cuts across natural cycles (it is a time of abrupt interruptions) and therefore time divided as, for example, timetables can be used as a (artificial) mechanism of control; time is made up of divisible 'nows'. Time expands creating the potential for ever greater uses of time. Importance is placed on maximizing time and not 'wasting time'.

These ideologies manifest in New Zealand schools in the following ways. Learning follows predetermined stages of linear development as opposed to unfolding organically. Sequential learning provides a measured 'before' and 'after' with the expectation that change, in the form of 'achieving one's potential' will occur; straight-line logic and reason is highly valued; rigid time structures, invested with power control learners' movements and actions, and what they learn in schools - the more time is broken down the more learners can be regulated; learning is compartmentalised to accommodate fixed timetables. Learning is disconnected from its learning context - learning has become fragmented and piecemeal. Timetables

create routines but not rhythms; and, there is an emphasis on the 'now' and to some extent the future but the past is less important; learners are under pressure to 'maximise their use of time' and not 'waste time' in relation to 'achieving their potential'.

Aristotle and Plato had differing views on time, but both have greatly influenced the way time is understood in the Western world, and indeed, the way time is structured in New Zealand schools. Plato argued that time came into being when God created the world and that both time and number are associated with order and the process of 'coming into being'. Aristotle gave us the notion of quantified, linear time with its possibilities for dividing time, by which means order could be established. These notions of time would resonate far into the future, manifesting in the monasteries of Christianity, underpinning the Protestant reformation, fuelling the Industrial Revolution, and coordinating the public school system – all with the same motivation, namely, power and order.

I will continue with the ideas put forward by Aristotle and Plato about time as I proceed to the period associated with the rise of Christianity (the Dark Ages or the Middle Ages) when St Thomas Aquinas took up the teachings of these philosophers and integrated them with Catholic principles (Fanfani, 1935; von Leyden, 1964). Aristotle's and Plato's notions of time can clearly be seen in the way time was structured in monasteries.

Monasteries and time: Daily structured routines

The time that is lived and practised today in the Western world and in New Zealand schools was born in the monasteries of the Dark Ages. The Christian church took a hostile stance toward the natural philosophy of the Greek philosophers (Frank, 2011), insisting instead that the universe, and hence time, was brought into existence by an act of God who created order out of primitive matter. The Church held the view that "God's nature is to impart order constantly, while the nature of matter is to be ordered ..." (Farndell, 2010, p. 22). Consistent with this view was the belief that the ultimate end of human kind - ever seeking "the realisation of an "ought to be"" was "eternal happiness" (Fanfani, 1935, p.121). Monasteries, some 40,000 during the Benedictine

rule, were dedicated to the attainment of salvation through work and prayer (Mumford, 1935). To this end, monasteries were models of order and discipline, and time was the instrument that instituted order.

The prototype for the daily structured timetables of schools, the Canonical hours, was the means for achieving order and discipline in monasteries. Strict daily routines or timed sequences were the rule in monasteries, the purpose of which was to instill discipline through regular habits of work and prayer (Mumford, 1935). Set times were established for prayer and these were known as the Canonical hours. Bells were introduced in the seventh century, calling the monks to prayer seven times in the course of the day (Mumford, 1935). A new approach to time was emerging. Monasteries provided the model upon which human enterprise – whether worship, industry or learning – could be regulated and coordinated by the collective beat and rhythm of the hours.

The following is a summary of Christian theories about time and the inherent ideologies that would greatly influence the developing Western society. God is the author of the universe and therefore time, leading to the complete authority of God and the movement away from natural philosophy and nature. Importance was increasingly placed on order and power; Western man has dominion over nature - God has placed the natural world at the disposal of Western man in the pursuit of redemption. This belief propelled Western man in a continual quest for progress and mastery over nature and natural impulses.

These ideologies manifest in New Zealand schools in the following ways: learners learn about authority and power; learners are taught discipline; Western knowledge and belief systems are highly valued - indigenous belief systems and knowledges have less value, but where there is value, these knowledges are also at the disposal of Western man; Indigenous notions of time are eroded and replaced by Western notions of time; and, learners' innate sense of time – when to eat, rest, play and learn - are replaced with fixed routines and rigid timetables.

The protestant movement and time

The Western obsession with work and not wasting time – endorsed in New Zealand schools – can be traced to the asceticism of the Protestant tradition. The Protestant movement, instigated in the early sixteenth century, took the Catholic ideals of asceticism and religious devotion out of the monastery and into daily life, in the belief that salvation could only be gained by committing oneself and one's time to hard work (Weber, 1958). The Puritan doctrine of pre-destination (that some were saved and others damned, and that the choice was pre-determined by God) intensified the need to prove oneself through hard work (Riesebrodt, 2005). This conviction is highlighted by Reverend Heywood, 1690 (as cited in Thompson, 1967), as follows:

Time lasts not, but floats away apace; but what is everlasting depends upon it
... The great weight of eternity hangs on the small and brittle thread of life . . .
our working day, our market time ... O Sirs, sleep now, and awake in hell ...".
(p. 87)

The concept of work as a moral end in itself, 'a calling' emerged as a consequence of the Protestant tradition (Riesebrodt, 2005; Weber, 1958).

The modern capitalist spirit, which would in due course influence the organisation of time and learning in New Zealand schools, was borne out of the concept of work as 'a calling' (Weber, 1958). Modern capitalism, the pursuit of wealth for wealth's sake, can be attributed to the Puritan belief that a life dedicated to hard work, frugality and self-discipline were proof of one's religious devotion (Weber, 1958). The accumulation of wealth was evidence of success and that one was surely 'chosen' by God (Riesebrodt, 2005). The Puritan tradition, which provided the model for modern capitalism, also provided the model of a disciplined labour force (Riesebrodt, 2005). The expansion of industrialism in the West would bring about the need to replicate such a disciplined labour force.

These Protestant beliefs about time and the inherent ideologies gained prominence in Western society: time is a limited resource (finite) and, time must be used productively - work is the priority; those who work hard work are to be admired;

success comes to those who work hard and those who accumulate wealth will be elevated in society.

The following messages became constantly conveyed through education: time must not be wasted; work must be prioritised over leisure; success is linked to hard work; order and self-discipline are keys to success; education is the means for gaining employment; education will bring about social change; and, education is critical to one's future success.

Newton, industrialism and the rationalisation of time

Newton was responsible for the theory of absolute time, which confirmed for the West that time was something separate from nature, an idea that lends itself to the mechanical time structures of schools. Unlike Aristotle, who believed that time is relative to changes in matter, Newton theorised that time has a distinct reality, independent of space and matter (Frank, 2011). As an absolute, separate from the universe, time's flow, according to Newton, is uniform and invariant, the same everywhere in the universe (Frank, 2011). In essence, Newton's conception of time was the same as Aristotle's, that time has an underlying, continuous, linear structure. Like Aristotle, Newton was interested in time's operational value, how time works and the uses of time (Adam, 2004). In effect, Newton brought Aristotle's notions of time, namely: time is invariant; time is linear; time can be measured; and time can be divided into spatial units of time, into the nineteenth century (Adam, 2004), just as the European Industrial Revolution was about to materialise.

The following ideologies fundamental to Newton's absolute time increasingly characterized Western society: time is absolute - there is one true time, Western time; time is invariant and uniform - time is not relative to space or matter, time is the same everywhere in the universe; and, time proceeds unabated.

These Newtonian trends and ideologies are manifest in New Zealand schools in the following ways: learners experience Western notions of time to the exclusion of all

others; learners are made to feel the urgency of time and the need to maximise opportunities – ‘time and tide wait for no man’.

The European Industrial Revolution, which began in the early nineteenth century, was the catalyst that cemented clock time in the Western world (Lefebvre & Regulier, 2003). The Industrial Revolution was the natural confluence for the theories and developments about time examined thus far: Newton’s absolute time; Plato’s theory on time, number and establishing order; Aristotle’s linear, quantified, divisible time; the desire for power and order, and the regimented routines of the monasteries; the Protestant obsession with time and work; the development of the standardised calendar and the mechanical clock; the hour and the minute. All these theories converge at this historical meeting point and the outcome is rationalised time or clock time. The Industrial Revolution would forge an entirely new system of time, the likes of which, hitherto, had not been seen or experienced. Clock time would have far reaching consequences economically and socially for Western man and, in fact, for all humankind (Lefebvre & Regulier, 2003).

The time of the English peasantry or village community is best described by the notion ‘task-orientation’. In spite of the diffusion of timepieces from the fourteenth century onwards, life in the English village had undergone little change prior to the Industrial Revolution (Trevelyan, 1936). The working day of the English labourer, whether engaged in subsistence farming or cottage industries, was organised around tasks and the requirements for completing those tasks (Thompson, 1967). The completion of tasks was time-variant as other factors came into play, like the weather or the availability of materials. Work life alternated between periods of intense labour and inactivity, and there was little distinction between social life and work life. The workday of the English labourer was attuned to natural work rhythms – those of the task, the individual, the community and the natural environment. The workday had not yet been re-structured by clock time.

For all the efficiency of the new machines, made possible by Newton’s mechanics, it was the ubiquitous clock that powered the industrial engine, the factory system, and transformed the human experience of time irrevocably (Mumford, 1935). Large-scale manufacturing and farming forced the English labourer to seek employment in

factories (Trevelyan, 1936). The transition was difficult, as task-orientation became the timed labour of the factory workshop (Thompson, 1967). The drive to maximise efficiency and standardise production generated two innovations: the production line, which disrupted the natural rhythm of task completion; and time discipline. Under these new regimes, the task no longer regulated time; the clock did and the clock exacted regularity. Time was money and time sheets (exact to the minute), time-keepers, informers and fines ensured that time was not wasted (Thompson, 1967). The new labour habits and time discipline of factories would soon extend into every aspect of life; and schooling, which would be modelled on the factory system, would be singled out to prepare children for employment in the factories (Harvey, 1990; Lefebvre & Regulier, 2003; Thompson, 1967).

The following trends and ideologies fundamental to clock time - abstract, linear, standardised, quantified time - would increasingly characterize Western society: time can be used to synchronize activity - the workday became regulated and fixed; time has exchange value – the employer must ‘use’ the time of his labourer and ensure it is not wasted. Emphasis came to be placed on time, not the task or people; and, time came to regulate the completion of the task, not the task itself - routines are imposed as opposed to natural rhythms.

These trends and ideologies became manifest in New Zealand schools in the following ways: all learners and their learning conform to a standardised, regulated time frame - the time that is uniquely inherent within every individual is replaced by a regulated timetable; the teacher must ‘use’ the time of the learner and ensure it is not wasted - time is used to impose order and control over learners and learning. The emphasis is on time (including age and standardised developmental stages), not learning or the needs of the learner; and time, which is inherently associated with creation, is used to re-define reality based on clock and calendar time.

Conclusion

We began this chapter by studying the historical influences that have shaped Western time. As a result of this study we can now draw some conclusions about Western notions of time and the ideologies (beliefs and values) that have shaped, and are inherent in, Western time – and Western schooling.

Western time is:

- absolute, invariant and uniform. There is only one time, namely, Western time. Time proceeds unabated. Time is associated with the pressure that time is passing and time is being lost;
- abstract. Time is abstracted from nature. Time is associated with the standardised calendar and clock, and regulates people's lives. Local times (an innate sense of time) and natural rhythms have diminished value. Time is not relative in any personal sense;
- quantitative. Time is number; time is not associated with nature. Time can be measured numerically or quantified and, as such, time can be fixed. Quantitative time is dominant, to the exclusion of qualitative time; and
- linear. Time is unidirectional and continuous and, as such, time can be divided into equal spatial units, for example, timetables. Time then becomes discontinuous and finite – a time of abrupt interruptions that can be used as a (artificial) mechanism of control. Time is made up of divisible 'nows', creating the illusion that time can expand and that there is the potential for ever increasing uses of time. Time is associated with the pressure to conform and to do more in a limited period of time.

Christianity and Protestantism have also shaped Western time:

- God is the author of time. Western man has dominion over nature. Nature and natural impulses can be controlled; for example time can be controlled, and time can be used to regulate activity and people. Time is associated with order, control and discipline. Time is associated with progress and continual growth.
- The Protestant work ethic is such that time is a limited resource (finite) and must not be wasted. Time must be used productively; work is the priority. Time is associated with the pressure to work hard and to succeed.

Time in our everyday lives is, for the most part, taken for granted. We never really stop to think about time or, more particularly, about the ideologies that have shaped time, and permeate our experience of time. And yet Western time, as has been shown above, is not just time per se; Western time is weighed down and weighted with the

values, principles, and beliefs that are so much the essence of Western society and culture. This next section will show how Western ideologies are conveyed through time as it is practised in New Zealand school, thereby supporting the development of Western cultural identity over Māori cultural identity.

Time and Western identity formation in New Zealand schools

It is in the manner time is expressed or functions that Western ideologies are conveyed (Adam, 1995). This is never more evident than in New Zealand schools. The expression (structure and uses) of time in New Zealand schools will constitute the second section of this chapter. I argue that time functions to promote and nurture Western ideologies, and therefore Western identity formation, and at the same time, works against Māori learners developing and retaining their own sense of cultural identity. How then is time structured and used in New Zealand schools, and how do these structures and uses promote Western ideologies and therefore, Western identity formation? We begin by looking at the origins of the British education system, which was the model for time in the New Zealand education system.

Time and the British education system

The purpose of the British education system, established during the time of the Industrial Revolution, was not just about education. The purpose was to instil discipline and habituate young children into the long hours and the time disciplines of the factories (Harvey, 1990; Lefebvre & Regulier, 2003; Thompson, 1967). Musgrave (1969) states that the goals of the British education system were linked to religion and industrialism and included: the control of people's minds; preparing the working classes for employment; and egalitarianism (although the system that transpired was tiered). The purpose of schooling, therefore, was to prepare working-class children for employment by habituating them into the long hours and time disciplines of the factories. Time was *the* target and *the* mechanism for replacing the innate time habits of working-class children with the time disciplines of the factories.

The time disciplines of the factory were based on the abstract, linear, measured time of the mechanical clock with its hour and minute. As noted in the previous section,

the European Industrial Revolution was the catalyst that cemented clock time in the Western world (Lefebvre & Regulier, 2003). Add to clock time the Protestant work ethic and obsession with time, plus the desire for control and discipline of Christianity, and the outcome was the time structures and disciplines of the factory. Abstract, linear, measured time generated the rigid timetables that regulated the factory workday and workers, for example, when to start and stop work, what tasks to do and when, and the speed at which tasks were to be completed. These time disciplines, underlying beliefs and drivers were emulated in British schools and subsequently New Zealand schools, in order to habituate young people into the common net of Western time (Harvey, 1990).

Time, control and discipline

The principle function of time in schools is control and discipline. According to Foucault (1991) the purpose of discipline in schools is to diminish the power of the learner, to coerce the learner into a submissive state – a ‘docile’ body – but with increased capacity for acquiring certain knowledge and aptitudes. A ‘docile’ body is achieved by breaking down and replacing the natural rhythms of the learner with the rigid time structures and timetables imposed by schools, that is, Western time (Miller, 2000). The day in, day out assault on the body forces the body to accept these time disciplines (Lefebvre & Regulier, 2003). The body is thus trained to perform in certain ways, and to carry out tasks at certain times. Controlling the body by overcoming its natural rhythms is the key to controlling the mind (Foucault, 1991). In this manner, discipline is achieved and, in the process, Western time (and the ideologies inherent in Western time) is conveyed and becomes embodied by the learner.

What ideologies are conveyed through time in schools?

Time, which is inherently associated with creation, is used to re-create the reality of the learner in line with clock and calendar time. When learners’ innate sense of time is broken down and replaced by the time structures of schools, learners come to believe that there is only one time, Western time, and that time is associated with the standardised calendar and clock.

In schools, Māori notions of time are eroded and replaced by Western notions of time. In the process, the bond Māori have with the land and their *whānau*, *hapū* and *iwi* (kin networks), experienced through a personal relationship with *wā*, are likewise eroded. The value of local times and natural rhythms, an innate sense of time, *whakapapa* and the histories bound up in *whakapapa* is diminished.

Time structures in New Zealand schools

In the next part of this section, I will consider time as it is structured in New Zealand schools – in particular, the timetable and the period. Dividing time into smaller units of time, as in the timetable and the period, is a mechanism utilised by schools for imposing control and discipline over learners (Foucault, 1991). The timetable and the period regulate the movements and the activities of the learner, effectively replacing the natural rhythms of the learner with the routines of the school. The timetable and the period are the product of abstract, linear, quantitative time and these notions of time, and the associated ideologies, will be conveyed through the operation of the timetable and the period in New Zealand schools.

The timetable

The timetable is the principle means for organising time and establishing order in schools (Adam, 1995). All movements, learning and activities are synchronised by the timetable. The school day is broken down into strict divisions of time, each of which is measured and timed. The timetable creates fixed points, which direct the movements and the activities of the learner, for example, when the learner must arrive at school, when the learner will learn, when the learner may eat and play, and when the learner may leave school. Learners are made to keep to time and there are repercussions if the learner does not comply without reasonable justification. All involved in schooling are bound into, and regulated by, these timed sequences to ensure conformity to a regular, collective beat.

The period

The more time is broken down, the greater the potential for controlling learners and learning. The school day is divided into periods in which learning takes place. The period, in turn, is broken down into smaller segments of time; for example, entry to

the classroom, settling down, the lesson itself, putting away, and exit. Each of these segments is measured and has rules attached. For example, learners might be expected to line up at the door and wait for permission to enter the classroom. Once the learner has entered the classroom, a starter or 'do now' activity might be assigned for the first ten minutes of the lesson. Breaking time down into ever smaller units of measured time intensifies the use of time and maximises the teacher's control over the learner (Foucault, 1991). Learners become accustomed to the fragmentation of time and learning, and to having their learning time closely supervised.

What ideologies are conveyed through the structure of the timetable and the period?

Learners come to think of time as linear and, as such, time can be divided into smaller units of time, as in a timetable. Learners also come to think of time as quantitative; as such, time is number and can be fixed. Time can be controlled and time can be used as a mechanism to impose control, discipline and order. The more time is broken down, the greater the potential for controlling time, activity and people.

Within New Zealand schools, Māori learners (or any learners, in fact) do not have the opportunity to experience cyclical, relative, qualitative, and dynamic time, nor do Māori learners have access to the knowledge, beliefs and cultural practices associated with these notions of time.

The use of time in New Zealand schools

In the next part of this section, I will look at the way time is utilised in New Zealand schools, in particular, the effects of the timetable and the period, and the Western ideologies conveyed through the uses of time.

Time must not be wasted

The timetable is utilised to prevent idleness and to ensure that learners are meaningfully engaged throughout the school day, implying that time must not be wasted (Foucault, 1991). The teacher experiences, and learners are made to experience, the pressure of not wasting time, particularly when the activity is not

prescribed by the curriculum. On the other hand, linear time, which produced the timetable, is made up of divisible 'nows', creating the notion that time expands and that there is the potential for ever increasing uses of time (Foucault, 1991). Learners are made to feel the pressure of not wasting time, but also of extracting from time, ever more productive uses of time. Learners are under pressure to work quickly and efficiently, and to produce good work within the deadlines specified by the timetable (Adam, 1995). The focus, however, is on time – not the learning or those individuals engaged in teaching and learning. Learning is made to conform to time.

Learning must conform to time

The school curriculum is packaged (Musgrave, 1969). Time, the learner and learning are quantified. Learning in schools is pre-arranged to occur at a certain time in a child's life (according to age), at a specific rate and over a fixed time (Adam, 1995). Learning is broken down into pre-fabricated blocks of learning and arranged into fixed sequences. The order in which skills are learned is pre-determined (Postman & Weingartner, 1969). Similarly, learning is assessed against a pre-determined (Western) standard, and learners are expected to progress at a specified rate and within a specified timeframe. Because of the nature of the prescribed curriculum, and the requirement to conform to time, learning that occurs outside of the prescribed curriculum cannot be recognised for its value, or as valid (Illich, 1971).

The pressure to conform to time forces learning to be scripted. Because learning is prescribed, and sequenced to occur at certain times and within a specified time, not only has the content of the learning been pre-determined, the lesson has also been scripted (Woods, 1986). Teaching does not require an exploration of ideas or an exploration of the learners' prior knowledge or cultural background, but rather delivers pre-digested information. For the teacher, this requires a specific teaching style; and for the learner, an understanding of the conventions of such an approach to teaching (Woods, 1986). Teachers are not merely asking questions, but crafting responses, so that the pre-determined learning takes place within the allocated time. The period is broken down by the teacher to allow maximum control with which to affect a contrived style of learning that leads to a pre-determined outcome.

Learning is made abstract and is fixed through the mechanism of finite time

The timetable compartmentalises learning into finite, measured segments of time; time is abstracted and so too is learning. The daily reality of school life takes its experiential form from compartmentalised learning. Directed by the timetable, the learner will attend a science class, for example, and after a specified period of time, the bell will sound, science will end and the learner will move to the next class. Learning is thus fragmented by time, piecemeal and decontextualised or abstract. The finite length of each period determines what can be taught, and the manner in which instruction can occur. Priorities are set and allocations are made based on these finite, measured divisions of time. Learning activities, such as a *pōwhiri* cannot be contained within the finite, measured timetable, and so, they are unlikely to occur. Learners will have little opportunity to experience learning within a holistic, naturally occurring context.

What ideologies are conveyed through the use of the timetable and the period?

Learning is prescribed by the curriculum, and constrained by the timetable. Through the requirement to adhere to the timetable, learners will come to believe that when time is not being gainfully employed (in learning that is prescribed by the curriculum), time is being wasted.

Time is also associated with progress and growth, and the need to constantly do better. Time is associated with pressure – pressure to conform, to work hard, to perform with greater efficiency and in less time, and to achieve to a pre-determined standard within a specified period of time.

Learning follows pre-determined stages of linear development. Learners come to accept, through the timetable and the period that learners, learning and activity conform to time, as opposed to unfolding organically in a naturally occurring context. Time and learning loses its organic, creative value.

Because the timetable compartmentalises time, learning is also compartmentalised, fragmented and disconnected from its learning context. Time and learning are experienced as a series of abrupt interruptions and so there is no rhythm to time. Instead, time is associated with fixed routines.

Conclusion

The focus of this chapter was to demonstrate that time, as it is practised in New Zealand schools, fosters Western cultural identity formation, and thereby limits (or completely removes) meaningful opportunities for Māori to learn (about) their cultural identity.

The source of time in New Zealand schools is Western time. We began this chapter by examining the historical influences on Western time in order to understand not only Western time itself, but more particularly, the influences that have shaped Western time. This allowed us to draw some conclusions about Western notions of time and the ideologies inherent in Western time, and to understand how time functions in schools.

This raises the question of the viability of Māori learners having opportunities to learn in ways that support Māori identity formation. Just as Western time in New Zealand schools fosters Western identity formation, Māori notions of time (or *wā*), are instrumental and therefore critical in the formation of Māori identity. When Māori learners' innate sense of time is deconstructed and replaced by Western time, the intimate connection Māori learners have to the land, and to their kin networks (*whānau, hapū and iwi*) are also de-constructed. The effect of time in New Zealand schools is, therefore, to reconstitute and relocate Māori within Western frameworks of meaning.

Time, as it operates in New Zealand schools, will be taken up again in the next chapter, but examined in depth, from the perspective of Māori notions of time, traditional Māori educational practices and Māori identity formation.

Chapter five: *Wā and Māori education*

Word list: *hākui* (grandmother/s); *hui* (meeting/s); *kaumātua* (elder/s); *koroua* (grandfather/s); *maara* (cultivated garden/s); *mokopuna* (grandchild/ren); *mōteatea* (song and poetry); *pōwhiri* (formal welcoming ceremony); *pūrākau* (traditional stories); *raranga* (weaving); *rohe* (region); *taonga tuku iho* (knowledge and skills handed down); *tangihanga* (funeral); *tukutuku* (ornamental lattice-work); *tūpuna* (ancestors); *wā* (Māori notions of time); *whaikōrero* (speech making); *whakairo* (carving); *whakapapa* (genealogy); *whakataukī* (proverb/s); *whare wānanga* (house of higher learning).

Introduction

Situating the work

The previous chapter demonstrated that the time structures and uses of time in New Zealand schools reflect and support Western cultural identity formation. Time is a mechanism of control and its purpose, through the daily operation of the timetable, is to instil discipline. In the process, the learner's innate sense of time and natural rhythms are transposed as they adapt to the time disciplines of schools. In this manner, Western time and the ideologies inherent in Western time are conveyed to, and become embodied in, the learner. Western time and the beliefs and values inherent in Western society are reinforced and reproduced.

If New Zealand schools foster the formation of Western cultural identity through time, then what of 'Māori enjoying and achieving education success as Māori' and more particularly, what of Māori cultural identity? I argue that *wā* is instrumental in the formation of Māori identity, and that through *wā* Māori preserve, transmit and create not only knowledge pertinent to Māori identity, but in fact their existence as Māori.

When Māori learners enter New Zealand schools, they are exposed to Western notions of time. In the course of their day-to-day exposure to Western time, Māori learners' understanding of *wā* – gained through being on marae, being on the land, and being in the company of *hākui* and *koroua* – is eroded. Through time, Māori learners are acculturated into Western frameworks of meaning. Time, I therefore contend, is an unacknowledged part of the curriculum and structure of schooling? that is yet to be addressed in terms of the Ministry of

Education's desire, and indeed the desire of Māori, for Māori learners to both succeed academically in New Zealand schools and retain their identity as Māori.

This chapter will look at *wā* in relation to traditional Māori educational practices, in order to understand how Māori identity was formed within these educational practices. Western time determines the 'what', 'when' and 'how' of learning within New Zealand schools. Similarly *wā* determined the 'what', 'when' and 'how' of learning in traditional Māori education. *Wā* was not just about time; it was about the knowledge, pedagogy and cognitive skills within traditional educational practices that contribute to the formation of Māori identity. This chapter will be guided by the following two questions: What is the relationship between *wā*, traditional Māori educational practices and identity formation? What are the implications of time in New Zealand schools for Māori learners and Māori identity formation?

Before we begin, let us revisit time in the British education system, which was the model for time in New Zealand schools. Looking at the ideological and economic purposes of schools from an historical perspective allows us to understand why initiatives designed to support Māori learners to succeed 'as Māori' are so difficult to achieve in New Zealand schools (Apple, 2004).

Time in New Zealand schools – an historic perspective

Time and the unacknowledged curriculum

Time is an unacknowledged part of the curriculum in New Zealand schools. When we look back to the origins of the British education system, we are reminded that one of the purposes of British schools was to prepare working-class children for employment by conditioning them into the long hours and time-disciplines of the factories (Harvey, 1990; Lefebvre & Regulier, 2003; Thompson, 1967). Embedding Western time through strict timetables was, in effect, part of the curriculum. The timetable of British schools was adopted by the New Zealand education system, and assiduously applied to Native Schools, as illustrated in the following quote:

In every Native School there shall be a time table used. This document is to be hung up in a conspicuous position in the school-room, and its directions are to be always strictly followed. Every item of school work shall begin, and end exactly at the time indicated in the time table.

(Simon, Smith, Cram, Hōhepa, McNaughton & Stephenson, 2001, p. 328)

Western education, as in the Native Schools, was sought after by Māori (Jones and Jenkins, 2011), but this education also involved time disciplines that would, over time, displace *wā* and (as a result) the knowledge, pedagogies and cognitive skills so essential to Māori identity formation.

Wā, traditional Māori educational practices and Māori identity

In the introduction to this chapter it was stated that *wā* is integral to identity formation. It was also stated that *wā* determined the ‘what’, ‘when’ and ‘how’ of traditional Māori education. This section will explore the relationship between *wā*, traditional Māori educational practices and identity formation in regard to knowledge, pedagogy and cognitive skills. Let us begin by returning to *wā*, which was the subject of chapters two and three.

Wā

Nature provides the framework for conceptualizing *wā*. *Wā* is cyclical; this is the principal and underlying notion that characterizes *wā*. All other notions of time relate to, and arise out of, cyclical time. Because *wā* is cyclical, *wā* is also relative, qualitative and dynamic. Cyclical *wā* is the key to understanding the relationship Māori have with their past and, in particular, their *tūpuna* and tribal histories. That is, the past exists in parallel with the present; timeframes entwine the past, the present and the future; and timelessness exists in between defined events. *Wā* is relative to nature’s cycles, *tūpuna*, and events in history; these are the indicators of *wā*, in an otherwise timeless universe. Māori identity is constituted in relation to place and kin networks and, as was shown in chapter three, *wā* is integral to identity formation.

Wā, knowledge and identity

The natural environment, the past, *tūpuna* and tribal histories were significant sources of knowledge and identity to Māori, and provided the context in which learning took place. Subsequently education related to these important sources of information and knowledge, which reiterated Māori identity.

Māori had two priorities in terms of education, which nurtured Māori identity formation. The first was knowledge associated with horticultural and food gathering practices, which involved learning about the signs of *wā* as they occurred in nature and the effective and proper use of natural resources (Hemara, 2000). Māori identified with, and developed an

intimate knowledge of, the *rohe* they inhabited through learning about, and observing, *wā* as it occurred in their natural environment. The second priority related to the past as a source of knowledge, which included cultural beliefs and practices, *whakapapa*, and local histories (Caccioppoli & Cullen, 2006). These things defined the unique identity of the tribe. Tribal knowledge was encapsulated in *pūrākau*, *whakataukī*, *whakapapa* and *mōteatea*, and in art forms such as *whakairo*, *raranga* and *tukutuku* (Metge, 1998). *Kaumātua* were the repositories of such knowledge and were revered as a source of tribal knowledge and wisdom (Hemara, 2000).

***Wā*, pedagogy, cognitive skills and identity**

Wā is relative, qualitative and dynamic; so learning was relative, qualitative and dynamic. Learning occurred in context and was not fixed. The education of children took place within the community and occurred as a natural consequence of daily life. The teaching of young children was primarily the domain of *hākui* and *koroua*, who instructed their *mokopuna* about the natural environment, appropriate behaviour, relationships, tribal customs and histories (Metge, 1976). *Hākui* and *koroua* were the connection to the past and had at their disposal a ready knowledge of family relationships, tribal customs and histories, which were passed on to young children as the opportunity arose.

Māori were personally located in *wā* through their connection with the land, *tūpuna* and tribal histories. Learners were likewise located in their learning. Knowledge gained through personal experience was highly valued by Māori (Moon, 2003). Older children were given responsibilities, such as working in the *maara*; they learned by performing tasks (Metge, 1976). Teaching and learning was reciprocal and children were encouraged to inquire, explore, test ideas and solve problems as they arose (Hemara, 2000). As skills and knowledge were mastered, the learner was assigned more difficult tasks. Learning progressed over time, in relation to the innate time or readiness of the learner. Lessons learnt had an immediate benefit to the community and, in this way, young people gained experience and knowledge, while at the same time functioning and contributing as members of the community (Hemara, 2000).

The past was an important source of tribal knowledge and identity, acquired by young people in context and through experience. The past existed in parallel with the present, and was stored in the minds of *kaumātua*. Important sources of tribal knowledge (like *pūrākau*, *whakataukī*, *whakapapa* and *mōteatea*) were easily recalled and transmitted orally, as the occasion required. Great care was taken to preserve and transmit tribal knowledge unchanged (Metge, 1976). Memory, oral skills and aural skills were highly valued. Young people were

encouraged to attend tribal *hui* (such as *pōwhiri*), where cultural beliefs were enacted through ritual (Royal, 2005). Young people not only heard, but also witnessed, visual displays of cultural knowledge – and they physically participated in these enactments. They developed the ability to listen attentively such that, over time, tribal knowledge became committed to memory and cultural practices became embodied in the learner.

Learning tribal knowledge, as with practical skills, progressed as the learner's thinking processes matured (Moon, 2003). The knowledge encapsulated in *whakapapa*, *pūrākau*, *mōteatea*, *whakataukī* and art forms was often conveyed symbolically or through metaphor and, as such, could be complex. The scope and application of knowledge expressed through metaphor, however, was multi-layered and potentially unlimited (Hemara, 2000). Mythologies, which belong to the category of *pūrākau*, are a case in point. While myths were located in the obscure past, they could be adapted and re-interpreted in the present to suit the audience and the occasion (Metge, 1998). Sophisticated symbols and metaphors were thus broken down for young children, and became a familiar framework or foundation for subsequent layers of meaning and the integration of related ideas. In this way, knowledge from the past could be introduced and understood in the present.

The past, the present and the future were entwined through the relationship between the teacher and the learner. *Hākui* and *koroua* took a personal interest in the well-being and daily development of their *mokopuna*. As such, there was a close bond between teacher and learner. The teaching/learning/loving nature of the relationship between *hākui*, *koroua* and *mokopuna* reinforced family relationships and the connection between the past, present and future. The close bond between the teacher and the learner extended to one-on-one tuition, where a young person was tutored by a *kaumātua* in a specific learning area. This relationship might last for a short period of time or an extended period of time. Regardless, the teacher and learner were seen as an interdependent unit in which the knowledge of the past was conveyed to succeeding generations (Caccioppoli & Cullen, 2006).

Conclusion

Wā is integral to identity formation in traditional Māori educational practices. *Wā* is relative to the signs of nature, *tūpuna* and tribal histories. These areas of knowledge were learning priorities in traditional Māori education. Young children learned about *wā* as part of their education, and *wā* was instrumental in teaching/learning methods. *Wā* determined what was learnt, when the learning occurred and how the learning occurred. Through traditional education, Māori learners formed a sense of their identity.

Wā is relative, qualitative and dynamic; so learning was relative, qualitative and dynamic. In the course of their day-to-day experiences, young people developed a sense of their identity with place and kin networks by learning about their natural environment, *tūpuna* and tribal histories. Learning was not fixed and occurred as opportunities arose. For example, young people learned about the *rohe* they inhabited by gathering or cultivating food at the side of their *hākui* and *koroua*. Young people met, and learned about their relations, while in the company of their *hākui* and *koroua*. Young people learned about the past while attending *hui* and listening to *whaikōrero*. Because learning was not fixed, learning took place in the time of the learner.

The relationship between the teacher and learner was critical in traditional Māori educational practices. *Hākui* and *koroua* played an important role in educating *mokopuna*, providing the link between the past, the present and the future. *Hākui* and *koroua* passed on information about the natural environment, family relationships, tribal customs and histories to their *mokopuna*. Because of the close bond between *hākui*, *koroua* and *mokopuna*, the heart and the intuitive senses were engaged in the teaching/learning process, as well as the physical self, the social self and the intellect.

Learning occurred through experience and through participation. Young people were encouraged, for example, to attend and participate in tribal *hui*. In the course of such *hui*, young people learned about relationships and social obligations. Young people learned the art of *whaikōrero* by listening attentively to their elders making speeches. Young people learned by observing, listening to, and imitating their elders. In the process, cultural practices and tribal histories became embodied in the learner. Learning did not only involve receptive skills. Young people were also encouraged to inquire, explore, test ideas and solve problems in the course of their learning experiences.

Time in New Zealand schools and Māori identity

The previous section demonstrated that Māori identity was affirmed on a daily basis through traditional Māori educational practices. It also presented some models of learning in relation to knowledge, pedagogy and cognitive skills that support Māori identity formation. The next section will contrast *wā* and traditional Māori educational practices with time and educational practices in New Zealand schools today – in order to fully appreciate the implications of time, as it operates in New Zealand schools, on Māori learners and Māori identity formation.

The effect of time in New Zealand schools is to acculturate learners into the practices and ideologies of Western time. *Wā* is cyclical and therefore relative, qualitative and dynamic. Learning in traditional Māori settings was relative, qualitative and dynamic. Western time, by contrast, is linear and therefore abstract, quantified and fixed. Learning in New Zealand schools is likewise abstract, quantified and fixed. When Māori learners enter New Zealand schools, they are exposed to Western time on a daily basis and educational practices that foster Western culture. Unless Māori learners have regular opportunities to experience *wā*, their pre-existing experience of *wā* is eroded by Western time. Māori learners with no experience of *wā* do not have opportunities to learn about *wā*, and can only relate to Western time. The loss of *wā* is not just about time; it is about the loss of knowledge, pedagogy and cognitive skills, all of which contribute to Māori identity formation. Time is not only a barrier to Māori identity formation; it is a system of power that works to relocate Māori learners within Western frameworks of meaning.

Time in New Zealand schools works to erode *wā* while, at the same time, relocating Māori learners within Western frameworks of meaning. The first part of the next section will look at the effects of the erosion of *wā* on Māori learners and Māori identity formation.

The erosion of *wā* and the loss of identity

***Wā* and time in New Zealand schools**

Wā is relative. Māori understand *wā* to be relative to the land they inhabit, to prominent *tūpuna* and to events in history; these are important sources of Māori identity. Māori are personally located in *wā* through the land, through their respective *tūpuna* and through associated events in history. Time in New Zealand schools, however, is abstract; so Māori learners do not have the opportunity to learn about *wā* as a feature of nature, or the concept of *wā* in relation to *tūpuna* and events in history. Neither do Māori learners develop a personal relationship with *wā*. Time structures in New Zealand schools convey the ideology that time is homogeneous. Therefore, Māori learners come to believe that time is homogeneous and not relative to place, to people or to events in history.

Wā is qualitative; Māori associate *wā* with the qualities and conditions occurring in nature. These qualities define *wā*, giving *wā* form and character – which has meaning for Māori. Likewise, Māori are interested in the events of the past and the deeds of their *tūpuna*. It is these things that help to define *wā*, giving *wā* substance and meaning that Māori can relate to and engage with. Qualitative *wā* is integral to the relationship Māori have with the land, their

tūpuna and their knowledge of history. Time in New Zealand schools, by contrast, is quantified. Time is associated with, and regulated by, the time of the clock. Māori learners do not experience qualitative *wā* or have access to the knowledge conveyed through qualitative *wā* – both of which are important sources of Māori identity. Instead, Māori learners associate time with the standardized clock and calendar.

***Wā* and the timetable**

The abstract, quantified timetable of New Zealand schools restricts what can be taught and the methods of teaching. The timetable compartmentalises learning into measured segments of time. Priorities are based on these finite divisions of time, thus decontextualising and fragmenting the learning. Text book learning, which can be confined to the classroom, accommodates the compartmentalised timetable. Māori knowledge and ways of learning, on the other hand, do not fit with a prescribed curriculum or fixed timetables. For example, learning about the signs of nature and the natural environment in context does not fit into fixed timetables. Similarly, Māori learners have little opportunity to learn about their kin networks, their *tūpuna* and tribal histories within meaningful contexts such as *pōwhiri*.

Identity with place is eroded

Traditionally, the land and the natural environment formed an essential feature of Māori identity. When *wā* is eroded, the intimate association with place as a source of identity is eroded. Māori learners do not have the opportunity within the school day to learn about their natural environment through *wā* as it occurs in the land. Māori learners do not have access to the knowledge systems and innate wisdoms inherent within their natural environment – for example, the Ōtāne and Ōrongonui phases of the moon that convey favourable conditions for planting sweet potatoes. Māori students lose the awareness that time is located in every feature of creation, including man, and that time is understood as dynamic and as a symphony of that connectedness. The sense of well-being and of being co-creators in life, which is generated from the intimate association with the land, is diminished. Time and learning for Māori loses its organic, dynamic value; and identity with place becomes (for some) an abstract concept.

Identity with kin networks is eroded

Learning about kin networks, *tūpuna* and the past are important sources of identity for Māori learners. When cyclical *wā* is replaced by linear time, two important ideas about time are lost to Māori: the past exists in parallel with the present; and timeframes entwine the past, including the invisible realms, the present and the future. When these notions associated with *wā* are lost, Māori learners have a limited understanding of the concept of *whānau*, *hapū*, *iwi*

and (with that) the concept of *whanaungatanga*. The bonds Māori have with their kin networks and the past are devalued. In the course of their learning in New Zealand schools, Māori learners do not have access to knowledge about their *tūpuna* or tribal histories, both of which inform and affirm Māori identity. Knowledge and wisdoms handed down from the past are not available to them to derive meaning, understand the present, and construct the future.

The second part of this section will look at how time works to relocate Māori learners within Western frameworks of meaning.

Time fosters Western cultural identity

The timetable and control

Wā is relative and dynamic; as a consequence, Māori traditionally managed their lives to allow for its contingent nature. Māori were ready to accommodate and respond to others, or to opportunities as they arose. When Māori learners enter schools these days, however, their innate awareness of *wā* (constituted in relation to their own personal rhythms, the natural rhythms of the land and their community) is replaced by a standardized timetable. The timetable regulates learners' movements and activities, and Māori learners come to believe that time is an external force that can be utilised as a mechanism of control. They learn that man can control time and natural impulses; that order and discipline are virtues; and that punctuality and keeping to time are more important than flexibility and responsiveness, which are innate qualities of dynamic *wā*.

Learning must conform to time

Wā is dynamic; so, traditionally, learning was also dynamic. Traditional Māori education took place in the course of daily living; learning occurred as opportunities arose. Learning was a shared experience between the teacher and the learner, and inquiry and exploration were encouraged. Neither the learning, nor the learning outcome, was predetermined. Learning followed the inclination of the learner and progressed in accord with the time of the learner. Learning in New Zealand schools, however, follows pre-determined stages of linear development. The timetable not only specifies when learning will occur each day, but what will be learned. Prescribed learning leaves little opportunity for the exploration of ideas or discovery learning. The emphasis is on time – not the learning, the task or the needs of the learner. Teachers and learners are made to conform to time; they are timekeepers, as opposed to co-creators in the process of education. Māori learners come to believe that activity must conform to time, and that institutionalised learning has more value than learning that occurs outside of the school or classroom.

Time and pressure

Wā stops and starts. *Wā* is relative; it exists within a defined context and is dedicated to the purpose of that context. Outside that context, time does not exist. There is not the same pressure of time as there is in the Western world. When Māori learners enter New Zealand schools, however, they experience the constant pressure of time created by the belief that time is absolute, time is passing and time is being lost. The belief that time is made up of divisible 'nows', creating the potential for ever increasing uses of time, also places pressure on the learner. The timetable reinforces the pressure of time, placing an expectation on learners to perform and to achieve within a given period of time. The timetable reinforces the notion that time must not be wasted, and that every moment must be accounted for. As a result, Māori learners come to think of time as absolute, and that time is being wasted if it is not being gainfully employed in learning that is prescribed by the curriculum.

Time and priorities

Wā is relative and exists in relation to a specific activity. The duration of that activity however, is unspecified. Priorities give pattern to *wā*; for example, *wā* exists in relation to, and is given to the practice of, *whanaungatanga*. The emphasis is on the successful realization of *whanaungatanga*, not on time (Durie, 2001). For example, attending a *tangihanga* for the entire duration might be seen as a priority over attending school. When Māori learners enter schools, however, the value that Māori place on time is replaced by the value that Western society places on time. Māori learners learn that time has exchange value, so the emphasis is always on time. The teacher must use the time of the learner. Time must equal learning and achievement. Māori learners are made to feel the pressure to continually do better and to 'achieve their potential' through Western education. They learn that time must not be wasted, and they learn to place value on time rather than practices such as *whanaungatanga*.

Conclusion

Time in New Zealand schools is linear, abstract, quantified and fixed. When Māori learners enter New Zealand schools their experience of time through the timetable is linear, abstract, quantified and fixed. Māori learners do not experience, or have access to, the knowledge inherent in relative, qualitative *wā*, which supports Māori identity formation. Through daily exposure, *wā* is eroded and Māori learners come to associate time with the standardised calendar and clock. As a result, the bonds Māori have with the land and their *whānau*, *hapū*

and *iwi* (kin networks), experienced through a personal relationship with *wā*, are eroded. Māori identity is eroded.

The emphasis in New Zealand schools, through the operation of the timetable, is on time. Whereas *wā* is relative and dynamic, and traditional Māori managed their lives to allow for its contingent nature, Māori in today's schools learn that time is a mechanism of control, which can be used to establish order and instil discipline. Through time, people, activity and learning can be controlled. Whereas learning in traditional Māori settings occurred in context, and as opportunities arose, Māori learners today experience compartmentalised, predetermined learning that takes place within a classroom and within a specified time. The emphasis is on time, not the learner or the learning. Whereas *wā* stops and starts, Māori learners in New Zealand schools experience the pressure of absolute time; that is, the pressure to conform to rigid timetables, to not waste time, to maximise the use of time, to continually strive to do better and to 'achieve one's potential'. Because of the emphasis on time, value is placed on time rather than the fulfilment of cultural practices like *whanaungatanga*.

The next chapter of this thesis will look at the impossibilities and the possibilities for supporting Māori learners to develop or retain their Māori identity in New Zealand schools

Chapter six: What become impossible and possible

Word list: *ako* (teaching and learning); *hapū* (sub-tribe); *iwi* (tribe); *kai* (eat, food); *kaikaranga* (caller); *kaitiaki* (guardian, mentor); *karanga* (call); *koha* (gifting, gift); *maara* (garden/s); *manaakitanga* (honouring people); *manuhiri* (visitors); *marae* (the complex that incorporates the meeting house, courtyard); *Matariki* (the Māori New Year, the Pleiades); *Ngā Atua* (the Forces of Nature; the offspring of *Ranginui* and *Papatūānuku*); *ngā marama* (the moons); *ngā pō* (the nights); *ngā wāhanga* (the seasons); *Papatūānuku* (Earth Mother); *pou* (carved posts); *pōwhiri* (official welcoming ceremonies); *pūhā* (sowthistle); *pūrākau* (traditional stories); *Ranginui* (Sky Father); *taonga tuku iho* (treasured legacy); *tangata whenua* (people of the land); *tapu* (sanctified); *Te Ao Māori* (the Māori world); *Te Ao Whānui* (the wider world); *te reo Māori* (Māori language); *tikanga Māori* (Māori culture); *tūpuna* (ancestors); *wā* (Māori notions of time); *waiata* (song); *whaikōrero* (speech making); *whakapapa* (genealogy/ies); *whānau* (extended family); *whanaungatanga* (relationship, kinship, connection); *wharenui* (meeting house).

Introduction

Situating the work

In the previous chapter we examined traditional Māori educational practices in relation to *wā* and Māori identity formation. In traditional Māori settings *wā* and learning were cyclical, relative, qualitative and dynamic. Young people learned about their natural habitat, and the past, through *whakapapa*, tribal histories, and cultural beliefs, in contexts that gave substance to learning. There was a close relationship between the teacher and the learner, and teaching and learning were reciprocal. All of the intelligences were engaged in learning, but importance was placed on listening, observing and doing. Learning did not conform to *wā*, but occurred when the occasion presented itself and when it was appropriate for the learner. Māori identity was affirmed on a daily basis.

Time in New Zealand schools, on the other hand, is linear, abstract, quantified and fixed. Time not only inhibits Māori learners developing and retaining their cultural

identity as Māori, but is instrumental in assimilating Māori learners into Western frameworks of meaning. Māori learners, therefore, have to relinquish their identity as Māori, including their language and cultural beliefs, in the course of their education. This was the point made by Durie (2003) when he asserted that education in New Zealand schools should be as much about preparing Māori learners to participate with confidence in *Te Ao Māori*, as it is about preparing them to contribute to New Zealand society and the wider world with confidence.

This chapter looks at what becomes impossible and, more importantly, what becomes possible for Māori learners to achieve education success and retain their identity as Māori in English-medium schools. Māori identity is constituted in relation to place and kin networks. *Wā*, as has been demonstrated in previous chapters, is instrumental to identity formation. By learning about *wā* in relation to nature, Māori learners learned about their natural environment and developed a unity for the land they inhabited. By learning about *wā* in relation to the past, Māori learners learned about their *tūpuna*, tribal histories and cultural beliefs; they developed an affinity with their *tūpuna* and kin networks. By learning about *wā*, Māori learners learned that priorities give form to *wā*; for example, the successful realization of *whanaungatanga*. What opportunities, therefore, will Māori learners have to learn about *wā* in New Zealand schools?

Pedagogy also plays an important role in Māori identity formation. What opportunities are there for learning to occur in context, by listening, observing and doing? What opportunities are there to engage in teaching/learning relationships that are reciprocal and dynamic? What opportunities are there for learning that engages the heart and the intuitive senses, as well as the physical self, the social self and the intellect?

The answers to these questions will be explored in terms of factors that impede, and opportunities that facilitate, Māori learners enjoying and achieving education success while maintaining and enhancing their identity as Māori. These two categories will constitute the first two sections of this chapter. The final section will look at emerging educational models that are based on, and reflect, aspects of cyclical, relative, qualitative and dynamic *wā*.

Factors that impede education success as Māori

If we are considering the factors that impede Māori learners enjoying and achieving education success while maintaining and enhancing their identity as Māori, then the timetable as it currently exists is certainly a factor. Another factor is the New Zealand Curriculum. The national curriculum and the timetable are power structures that determine what knowledge will be taught, when and how. Both promote Western identity formation, to the exclusion of Māori identity formation. The timetable cannot achieve its purpose without the New Zealand Curriculum, and vice versa.

The Timetable in New Zealand Schools

Historical attitudes and power structures inherent in the way time is manipulated in New Zealand schools act in the interests of Western identity, culture and language. The use of the timetable in New Zealand schools emanated from the British education system; its purpose was to instil discipline and to condition the children of working-class families into the working hours of the factories. The factories needed workers who were easily controlled and could be relied on to be punctual and productive (Thompson, 1967). The structure and purposes of time in schools has changed little in the intervening years. The timetable in New Zealand schools continues to operate as a mechanism of control and discipline. But, more than that, the timetable is involved in processes of social reproduction or, in the case of Māori learners, assimilation into Western culture. While the timetable continues to function as it currently does in New Zealand schools, Māori learners are impeded from enjoying and achieving education success in ways that affirm and support Māori identity formation.

The New Zealand Curriculum

Because the New Zealand Curriculum is not the focus of this thesis, I only cite two examples that demonstrate how the New Zealand Curriculum fails to value Māori knowledge – in particular *te reo Māori* and *tikanga Māori*, which are fundamental aspects of Māori identity.

The place of *te reo Māori* within the New Zealand Curriculum

Te reo Māori is the one subject in the New Zealand Curriculum that directly relates to, and supports, Māori identity formation. The Ministry of Education (2009) appears to agree when it states, “te reo Māori ... is the vehicle through which Māori culture, spirituality and thought are expressed. Through te reo Māori, Māori learners can affirm their identities and access te Ao Māori and Māori world views” (p. 24). What then, is the place of *te reo Māori* in the New Zealand Curriculum?

The knowledge that is included in the national curriculum is determined by the dominant culture (Apple, 1993; Tomlins-Jahnke, 2008). To this assertion, Illich (1971) would add that institutionalised education is a means of defining what is legitimate and valuable, and what is not. What is legitimate and valuable in New Zealand society is reflected in the New Zealand Curriculum, which determines what and how knowledge is organized, resourced, taught and evaluated. While the New Zealand Curriculum determines that Learning Languages is a learning area, *te reo Māori*, which strongly affirms Māori identity, is not. Schools are obliged to teach a language. While *te reo Māori* is an official language of New Zealand, schools may teach *te reo Māori* if they elect to, but there is no obligation to do so. The likely outcome, as a result, is that *te reo Māori* will not be taught in some English-medium schools or will be taught in an ad hoc fashion.

Key Competencies or Cultural Competencies

The New Zealand Curriculum sets out five Key Competencies: ‘managing self’; ‘relating to others’; ‘participating and contributing’; ‘thinking’; and ‘using language, symbols, and texts’ (Ministry of Education, 2007).

Key Competencies relate to the development of values and capabilities necessary for participating and contributing in social contexts; for example, learning contexts or society. Asked to comment on commonalities between the key competencies and Māori knowledge, beliefs and practices, Macfarlane, Glynn, Grace, Penetito & Bateman (2008) found:

While there is evidence of some commonality in meaning between particular key competencies and particular Māori constructs, there is more evidence of where the Māori constructs did not ‘match’, because they were coming from quite different knowledge and value bases, and their meaning within a Māori

worldview was both wider and deeper than the meaning within the majority European cultural worldview. (p. 123)

Macfarlane et al. (2008) pointed out that ‘managing self’, as an example, promotes individualism and individual achievement, which is in contradiction to the Māori cultural ideal of balancing individual achievement against responsibility to the group. On the other hand, Macfarlane et al. (2008) proffered, Māori cultural constructs have the potential to both enrich the development of the national curriculum and to benefit all learners.

Both the timetable and the New Zealand Curriculum are formidable power structures that together operate in New Zealand schools to reproduce the ideologies inherent in New Zealand society. Rather than support Māori learners to maintain or enhance their cultural identity, the timetable and the New Zealand Curriculum work to assimilate Māori learners into Western culture. These two power structures endorse Western knowledge, pedagogies, and cultural values over Māori educational priorities. If schools do not offer te reo Māori programmes, and if schools do not incorporate tikanga Māori in to everyday school practices, then there will be very few opportunities for Māori learners to engage in learning that supports Māori identity formation.

Opportunities that facilitate education success as Māori

The principle means for organising time in most New Zealand schools is the timetable. We know that the timetable confines and constrains learning, and therefore acts as a barrier to Māori learners accessing knowledge and learning in contexts that validate Māori identity.

The second section of this chapter will look at opportunities, other than *te reo Māori* and *tikanga Māori*, for schools to support Māori learners to develop and retain a secure Māori identity. While the responsibility rests with *whānau*, *hapū* and *iwi* in the first instance, to nurture and educate their young people in terms of Māori identity, schools play a critical role in reinforcing Māori cultural identity (Ministry of

Education, 2012). Opportunities to learn about, and experience, *wā* are presented here as a sample, namely: learning about the past in the context of the *marae* and learning about *wā* in relation to the natural environment.

Learning about the past in the context of the marae

One of the few places left to witness and experience *wā*, particularly in relation to the past, is the *marae* – through *tūpuna* and tribal histories that are recounted during speech making, through the *wharenuī* itself and during the *pōwhiri*.

Wā, Tūpuna and Tribal Histories

Visiting the local *marae* is an opportunity to build relationships with the *tangata whenua*, and to learn about prominent *tūpuna*, local histories and historical sites that are significant to the *tangata whenua*. While many Māori learners live outside of their traditional homelands, visits to local *marae* provide Māori learners with an opportunity to learn about, and be located in, cultural environments that nurture and affirm Māori identity. Such culturally-grounded learning experiences also allow Māori learners to reflect on their respective *tūpuna*, homelands and tribal histories.

Schools could arrange visits to a local *marae*, with the goal of experiencing and learning about *wā*. As a consequence, learners will have the opportunity to reflect on the following aspects of *wā*: *wā* is relative to *tūpuna* and important historical events; through *wā*, *tangata whenua* have a personal relationship with *wā*; when Māori re-live their histories they are engaging with *wā* and reconnecting to the past, which is significant in the present; and, in former times, *tūpuna* and important historical events were the only framework for time.

Example

Visiting local *marae* may have little benefit to Māori learners in terms of learning that supports identity formation, if such visits are an isolated event. However, if there is an on-going relationship with the local *marae* and Māori community, the experience can be mutually beneficial, as in the following example:

Te Kotahitanga is a professional development initiative that places Māori

knowledge, pedagogy, cultural beliefs and practices at the heart of teaching and learning. When I was involved in Te Kotahitanga, one of the schools in the initiative developed a strong relationship with the local Māori community. A member of that community was assigned to the school, and worked with the teachers so that they could incorporate into their lessons, knowledge that was specific to the *tangata whenua*. Sometimes team teaching occurred, with the local community member retelling local histories in the course of the lesson. Lessons did not only occur in the classroom, but also at the local *marae*. *Whanaungatanga*, *manaakitanga* and *ako* were integral to the relationship that developed between the teachers and the local Māori community, which contributed to the success of a dynamic partnership.

Wā and the Wharenuī

Wharenuī embody *wā*, particularly in relation to the past. When learners approach and enter the *wharenuī* they will have the opportunity to witness and consider the following aspects of *wā*: timeframes entwine the past (including the realms of *Ngā Atua*), the present and the future; and the past exists in parallel with the present (there being a continuous dialectic between the past and the present).

Timeframes entwine the past (including the realms of Ngā Atua), the present and the future

Two realities exist in the Māori world: the invisible realms, which transcend time and space, and the material realm of *Te Ao Mārama* in which time and space are finite. These concepts about *wā*, the metaphysical and the material, are apparent in the *wharenuī*.

According to Barlow (1991), the *wharenuī* was traditionally designed to represent *Ranginui* and *Papatūānuku* in their nuptial embrace. *Papatūānuku* was the earthen floor and the *pou* lining the *wharenuī* portray *Ngā Atua*, the children of *Ranginui* and *Papatūānuku*, endeavouring to separate their parents. The interior of the house represented the invisible realms of *Ngā Atua*, while the exterior of the house represented *Te Ao Mārama*, the world of man. The doorway is the figurative threshold between the two cosmological orders. Moving from the invisible realms of *Ngā Atua* to the material realm of *Te Ao Mārama* symbolizes a change of state, as the material

proceeds from the non-material. The invisible and the material are shown as different but interconnected realms that co-exist in *Te Ao Mārama*.

In modern times the *wharenuī* has come to represent the body of a central ancestor. While the modern *wharenuī* has altered from the traditional model, the invisible realms are still represented in the modern design, creating an environment in which the infinite and the finite, the metaphysical and the material, co-exist. The underlying purpose of the modern *wharenuī* is to act as a link to the invisible realms (which are the source of metaphysical knowledge), to *tūpuna* (which are the source of tribal history and tradition), and to the land.

The past exists in parallel with the present

To Māori the *wharenuī* is a living ancestor. Linzey (2004) notes, “the architecture of the Māori is radically alive – it is not merely symbolic but is imbued with meaning” (p. 13). The carefully conceived aesthetic of the *wharenuī* integrates several domains of art, *whakapapa* and the metaphysical (Linzey, 2004). This network of signs creates a cosmic timelessness in which the metaphysical, the remote past and the recent past are reconciled in the present (van Meijl, 2006). Surrounded by their *tūpuna*, the mythological characters and *Ngā Atua*, Māori are figuratively and literally located in their past. Ancestors and events in history live on through the *wharenuī*, ensuring that the past (which is an important source of identity, culture and language) is passed on to successive generations.

School Marae

Some schools have their own *marae* and while the *wharenuī* are, for the most part, built for the purpose of education, they are none-the-less places in which Māori learners can be encompassed within those aspects of *Te Ao Māori* that nurture their identity as Māori; for example during *pōwhiri* that take place on the marae.

Wā and the Pōwhiri

The *pōwhiri* is one of the few traditions left to Māori that continues to reflect and express *wā*. When Māori learners engage in *pōwhiri* they will witness and experience the following aspects of *wā*: *wā* conforms to cultural priorities; timeframes entwine

the past (including the realms of *Ngā Atua*), the present and the future; and circular patterns, not unlike the cycles of nature, are enacted through the rituals of the *pōwhiri*.

***Wā* conforms to cultural priorities**

During a *pōwhiri*, Western time is suspended in deference to *wā*. As Durie (2001) points out, the emphasis during a *pōwhiri* is not on time, but “allowing time for the full elaboration of events and discourses” (p. 77). *Wā* conforms to the proper fulfilment of cultural principles that are of value to Māori. For example, the *pōwhiri* revolves around two important principles: *manaakitanga* and *whanaungatanga*. *Wā* is ordered to fulfil those processes, which ensure the establishment and maintenance of relationships that will have ongoing significance for the people in attendance (Durie, 2001). The pace of the *pōwhiri* is often set by the speakers; the priority is not to keep to time but to give people time to say what they want or need to say in order to realize customary obligations and demonstrate a commitment to lasting relationships (Durie, 2001).

Timeframes entwine the past (including the realms of *Ngā Atua*), the present and the future

The *pōwhiri* begins with the *karanga*, which is the signal for the *manuhiri* to proceed on to the *marae*. The *karanga* invokes the invisible realm and is a reminder that the metaphysical permeates the material world of man. The *kaikaranga* acknowledges first the *manuhiri* (visitors) and then the deceased who are associated with the visitors coming onto the *marae*. It is during the *karanga* that the *marae* and the visitors become *tapu* (Barlow, 1991) in preparation for the speeches.

Like the *karanga*, the *whaikōrero* acknowledges that the invisible realms, the past and the present are intertwined. Through *whaikōrero*, reference is made to *Ngā Atua*, to the *marae*, to the *wharenuī* and to the land, thereby locating the present within the greater context of the metaphysical and the past. In former times, it was customary for orators to recite comprehensive *whakapapa* in the course of their speeches. This served to bring *tūpuna* and the past to the fore and, importantly, to unify all those in attendance – the living and the deceased (Durie, 1998). It is through the *whaikōrero* and the *waiata* that those in attendance are reminded of their connection to the past, which is the source of Māori identity, tradition and language.

The rituals in the *pōwhiri* resemble a circle

The movements and symbolism of the *pōwhiri* resemble a circle (Durie, 2001) or a spiral. These circular patterns are not unlike the cyclical patterns of nature. A circular relationship is established between *tangata whenua* (who are the connection to the land) and *manuhiri*; and this is reinforced through the rituals of the *pōwhiri*. For example, the *karanga* begins with the *tangata whenua*, and is responded to by the *manuhiri*, but the final *karanga* rests with the *tangata whenua*. Likewise, the speeches proceed in a circular fashion starting with the *tangata whenua*, extending out to include *manuhiri*, and finally returning back to the starting place, the *tangata whenua* (or the land). The circular relationship is also reflected in the practice of *koha*. As Durie (2001) explains, “the primary purpose of *koha* ... [is] to strengthen ties and create mutual obligations” (p. 79). Such relationships are based on reciprocity and are intended to endure over the generations. All the while, these circular patterns, enacted through ritual, are progressing toward an end point, in preparation for the next stage of the proceedings.

Example

Some schools incorporate *pōwhiri* into school practices and they become a normal occurrence in the school for teachers and learners. I once hosted a visitor from Wales who was conducting research on the revitalisation of indigenous language through education. I contacted the principal of a local school to arrange a visit. The following morning, we were welcomed onto the school with a *pōwhiri*. *Whānau* who were in the school that morning participated in the *pōwhiri*, as did the teachers and learners from the bi-lingual unit, the principal and senior leaders. The *pōwhiri* took place without concern for time and it was obvious that this was not an unusual event for this school. The *pōwhiri* was followed by morning tea and then we were invited into the bi-lingual unit to observe the teaching and learning.

Learning about *wā* in relation to the natural environment

Opportunities to learn about the natural environment in ways that reinforce Māori identity in relation to the land are obviously limited in English-medium settings. There are of course more opportunities for Māori learners to learn about their natural

environment in rural schools, which will have personal significance for Māori learners who are also *tangata whenua*. An alternative then is to provide opportunities for Māori learners to learn about cyclical, relative, qualitative and dynamic *wā*, although the learning will have little impact without meaningful experiences.

Experiencing the concept of *wā* through inquiry learning

In chapter three, the concept of *wā* was described as follows: *wā* exists within a defined context, and is dedicated to, and defined by, the purpose of that context. Outside of that context, *wā* does not exist (the notion of timelessness). Inquiry learning lends itself to *wā*, and could provide the context for *wā*, as opposed to learning that is compartmentalized by a timetable and must conform to time. If possible, learners should abandon clock time for the duration of inquiry learning. What do learners experience when learning, activities and movement are not controlled by the clock?

I offer these inquiry topics in relation to learning about *wā* as examples:

Māori learners could be introduced to cyclical *wā* during the advent of *Matariki*. Learning about cyclical *wā* provides the opportunity to learn about relative, qualitative and dynamic *wā*. Why were stars important to Māori? How do you read stars and what do they tell you? What other signs occurring in nature indicate when and where to collect or hunt for food? What is relative *wā*? Does timelessness really exist?

Māori learners could be introduced to the principal divisions of *wā*; for example, *ngā wāhanga*, *ngā marama* and *ngā pō*. Who within the *whānau*, *hapū* or *iwi* still has knowledge about, and refers to, the Māori calendar for eeling, fishing, hunting and gardening?

Māori learners could inquire into, and set out, a *maara* using traditional methods. How did Māori know when to set out *maara*? How were *maara* set out? What traditional instruments were used?

Wā is the key to an intimate knowledge of the natural world; it is this knowledge that creates a sense of identity or an affinity that Māori have with their natural habitat. The natural world is an important source of knowledge for Māori learners; it is a text-book, but an open text-book that is alive, energized and interactive.

In traditional times (and also today) Māori had an extensive knowledge of their natural environment. As Firth (1929) points out, "... the Māori of olden time was remarkably well versed in all matters pertaining to his natural surroundings" (p. 42). Māori lived in accord with their natural environment and understood themselves to be part of the natural order, not separate or superior to it. As such, Māori understood the natural world to be "the embodiment of knowledge" and "a teacher for the human person"; and the natural world could "'live in' and 'speak into' the consciousness of the human being" (Royal, 2005, p. 3). This perception of the natural world changes the idea of knowledge into an "energy rather than a finite product" (Royal, 2005, p. 3). When we start to understand knowledge as energy, the fundamental principles upon which education is currently based changes. Knowledge and learning can no longer be linear, abstract, quantified and fixed; learning becomes cyclical, relative (intensely personal), qualitative and dynamic.

The past is still significant in the lives of Māori learners

Taonga tuku iho (knowledge handed down from *tūpuna*) is still valid for Māori learners today not just in terms of identity; as in former times, the past can be reinterpreted or applied within present-day contexts. For example, learning about the natural environment includes environmental studies and conservation, horticultural practices, science, economics and literacy (reading, interpreting and interacting with nature). Learning about *whakapapa*, *whaikōrero*, *mōteatea* and *pūrākau* includes poetry, proverbs, the use and interpretation of metaphor, structuring a speech or a story and literacy (listening, speaking and singing as a means of calling the past into the present). Learning about *tikanga* includes embodying *whanaungatanga* and *manaakitanga* in order to build and maintain relationships.

Learning about, and from, *tūpuna* and tribal histories has broader implications for Māori learners. For example, learning about the past, including New Zealand's recent

colonial past, enables Māori learners to not only reconcile the past with the present, but also to construct a positive future. Learning about *tūpuna* and the past provides Māori learners with role models and practical models for living, such as organisational skills, resourcefulness and resilience.

The past and the natural environment, as has been shown, is an important source of knowledge and identity for Māori learners. Opportunities to learn in ways that support Māori learners to develop a secure identity as Māori in English-medium schools, however, are restricted by the timetable (and the New Zealand Curriculum) and are, for the most part, consigned to localized experiences. What alternatives are available to Māori learners within English-medium education? The next section of this chapter looks at some exciting developments in English-medium schools that enable Māori learners to enjoy and achieve education success while maintaining and enhancing their identity as Māori.

Education based on cyclical, relative, qualitative and dynamic wā

Do English-medium schools prepare Māori learners to both participate in *Te Ao Māori* with confidence and to succeed in New Zealand society and the wider world? The evidence suggests that education is failing Māori learners on both counts. Recent statistics indicate that, “less than half of Māori youth will leave secondary school with NCEA Level 2 or better” and “over a third of Māori students will leave school without any qualification at all” (Ministry of Education, 2013, p. 3). We know also that time is a controlling and confining factor that prevents Māori learners from participating in meaningful learning experiences that validate and affirm Māori identity. Given the evidence, we would have to say that English-medium schools are failing the majority of Māori learners both in terms of academic success and affirming their identity as Māori.

If the current education system does not support Māori learners to achieve education success ‘as Māori’, then what is the answer? According to Bishop, Berryman, Cavanagh, & Teddy (2009) the solutions to Māori educational disparity do not lie in the mainstream. Educational practices in New Zealand schools, they stress, “ have

kept Māori in a subordinate position, while at the same time creating a discourse that pathologized and marginalized Māori peoples' lived experiences” (Bishop et al., p.741). Milne (2009) asserts that there is a need to re-evaluate the fundamental principles upon which Māori learners are being educated. Penetito (2010) concurs and adds that the answer lies in alternatives that value Māori educational priorities.

What then might alternative educational practices consist of? Bishop, Berryman, Cavanagh, & Teddy (2009) believe that alternatives should come from Māori “cultural sense-making processes” (p. 741). Milne (2009) adds, “it is time to ... develop learning models that will allow [Māori learners] to develop secure identities throughout their learning experience at school” (p. 18). Penetito (2010) agrees, insisting that a secure Māori identity is a “valid end point in itself” (p.52). Tomlins-Jahnke (2008) adds that Māori knowledge, history, language and culture need to be integrated throughout the curriculum so learning that validates Māori identity is not merely a localized experience. The views expressed here echo those articulated so compellingly by Durie (2003) when he stated that education must reflect and reinforce Māori identity, as well as prepare Māori learners to succeed in wider contexts. The answer then, it would seem, is to emphatically place Māori identity, knowledge, language and culture at the heart of education for Māori learners.

The next part of this section looks at two schools: Tai Wānanga and Te Whānau o Tupuranga, both of which represent a new way of thinking about Māori education. Tai Wānanga and Te Whānau o Tupuranga are modeled on traditional Māori educational practices that affirm Māori identity while at the same time equipping Māori learners to succeed in wider contexts. Both schools position Māori knowledge, language and culture at the centre of education; they are based on, and reflect, learning that portrays cyclical, relative, qualitative and dynamic *wā*.

Tai Wānanga

Tai Wānanga is a Designated Character school for Year 9-13 students. It operates within a uniquely Māori environment and embodies ‘Māori succeeding as Māori’ (Tai Wānanga, n.d.).

Learning is the constant, time is the variable

In traditional Māori education, learning was cyclical, relative, qualitative and dynamic. Learning was not confined or constrained by time. Learning occurred as opportunities arose or demanded. Similarly, Tai Wānanga operates on a flexible timetable that collapses when necessary. For example, if a student has an assignment due at the end of the week, the timetable collapses to allow the learner to focus on that assignment (Riches, personal comment, June 28, 2013). The emphasis is on the learner and learning, not conforming to a rigid timetable. This is in contrast to the linear, abstract, quantified, rigid timetable of English-medium schools, which fixes what, when and how learning will occur.

An individual learning plan for each learner

In traditional Māori education, learning followed the inclination and the interests of the learner and was guided by elders. Similarly, Tai Wānanga provides a flexible system that accommodates the learning requirements of the student. Individual teaching and learning plans are developed in consultation with the *kaitiaki*, the learner and the learner's *whānau* (Riches, personal comment, June 28, 2013). Individual learning plans are based on the personal interests and career aspirations of the learner; and a learning pathway is tailored to ensure the learner achieves his/her personal goals. Tai Wānanga also recognizes that learners are at different stages in their learning, so programmes are multi-levelled and multi-aged. Learners are personally located in their learning. By contrast, learning in New Zealand schools follows pre-determined stages of linear development and is not tailored specifically to meet the learning needs of the learner. Learners and learning are made to conform to pre-determined learning programmes, for the most part determined by age and not ability.

The teacher:learner relationship is central to teaching and learning

In traditional Māori education settings, the relationship between the teacher and the learner was central to the education of young people. *Hākui* and *koroua* took a personal interest in the well-being and daily development of their *mokopuna*; they guided them in their learning and their life pathways. Because of the close bond, education was holistic and involved the total well-being of the *mokopuna*. Similarly, in Tai Wānanga, *kaitiaki* are responsible not just for the intellectual, but also the

physical, emotional and spiritual well-being of the learner (Tai Wānanga, n.d.). By contrast, the focus in English-medium schools is on academic learning; there is not the same emphasis on relationships. The teacher often takes on an authoritative role, rather than that of a *kaitiaki* who mentors and monitors, in a very personal way, the development of the learner.

Te Whānau o Tupuranga

Te Whānau o Tupuranga is the Centre for Māori Education within Kia Aroha College, a Designated Special Character school for Years 7-13 students (Te Whānau o Tupuranga, n.d.).

The vision of Te Whānau o Tupuranga, developed in consultation with *whānau*, articulates the overarching goal of Ka Hikitia, which is that Māori learners are enabled to enjoy and achieve education success while maintaining and enhancing their identity as Māori (Milne, 2009). Māori identity is continually reinforced through school-wide practices and learning programmes that incorporate Māori knowledge, *te reo Māori* and *tikanga Māori*. Māori identity is reinforced on a daily basis in Te Whānau o Tupuranga, through learning environments and teaching practices that reflect cyclical, relative, qualitative and dynamic *wā*.

The teacher:learner relationship is central to teaching and learning

Because the philosophy of the school is based on *whanaungatanga*, relationships are central to teaching and learning – whether that be the relationship between the teacher and learner, or the relationship between learners. Teaching and learning are based on the principles of *ako* and *tuakana/teina*. The significance of *ako* to Te Whānau o Tupuranga is conveyed through the statement, “[when] you receive learning, you share it, you give it back to other learners” (Te Whānau o Tupuranga, n.d., p. 2). Learners work in collaboration with their teachers and with other learners, and learning is a shared experience.

Teaching and learning is relative, qualitative and dynamic

Learning is not abstract or pre-determined, but is relative to the day-to-day lived reality of the learner (Te Whānau o Tupuranga, n.d.). Learning is negotiated between teachers and learners, is inquiry-based and generated by learners' questions. These questions open up new pathways of learning, which are dynamic. Neither the learning, nor the outcome, is pre-determined. Critical inquiry is also encouraged and is likewise generated by issues that are of concern to learners or matters of social justice. Because learning is inquiry focused, the curriculum is integrated, rather than taught as individual subjects that are fragmented and compartmentalised by a fixed timetable.

Learning does not conform to time

Learning is not controlled or confined by a fixed timetable, nor are learners made to fit into linear programmes of learning that are pre-determined. Learning is personalised and differentiated to fit with the learning needs and style of the learner. Multi-age and multi-levelled learning programmes are designed to complement the requirements of the learner (Te Whānau o Tupuranga, n.d.). The school day is divided into three ninety-minute blocks; bells do not ring or control the movements of teachers and learners. The timetable is flexible; learners can work intensively in double blocks, or the timetable can be collapsed altogether. Timeframes are negotiated when the learning is negotiated at the beginning of each new topic. Teachers and learners are not made to conform to time, but are co-creators in the process of education.

Learning takes place in contexts that affirm Māori identity

Learning spaces are not compartmentalised but open and flexible – in keeping with creative, holistic learning environments. There are no internal walls or closed spaces. Teaching is not confined to a classroom and there are no fixed whiteboards or other devices that indicate a 'front of the classroom' (Te Whānau o Tupuranga, n.d.). Because of the open plan design, the indoor spaces are not disconnected from the outdoor spaces (which are planted in native trees, flaxes and grasses). The openness of the design welcomes *whānau* into the learning spaces and allows them to participate in the education of their children.

The school marae, Kia Aroha, is central to school life and is used extensively. The *marae* provides an authentic context in which Māori learners can experience and practise *tikanga*; for example, hosting *manuhiri*, and extending *whanaungatanga* and *manaakitanga*. There is a *marae* garden, which is a source of food. The important role of Kia Aroha was summarised by staff as a place where learners are:

Sustained with ancestral traditions, ancestral knowledge, unfailing love, nurturing, belief, a striving spirit, righteousness, kindness, and skills, where they develop an openness of mind, and become alert, alive, eager, and brave, where a child learns to treat kindly their world, and the surroundings that shelter them, and become aware of those that can harm them. From here growth is seen as reaching the uppermost heights of the realisation of their aspirations, and dreams. (Milne, 2009, p. 11)

Kia Aroha marae is the heart of the school and a context in which Māori learners can experience *wā* and what it means to be Māori in its fullest expression. However, these experiences are not confined to the school marae or a localized experience. Living and learning as Māori, as has been shown, is experienced throughout the school and learning practices.

Conclusion

Tai Wānanga and Te Whānau o Tupuranga foster all those elements found in traditional Māori educational practices that affirm Māori identity: learning within a personal and caring context; living in accord with the natural environment; the significance of the past; learning by experiencing and participating in cultural contexts; and learning with an open mind and curiosity. Learning does not conform to time, nor do cultural practices conform to time. Learning is experienced in contexts that reflect cyclical, relative, qualitative and dynamic *wā*.

Chapter seven: Conclusion

This research set out to examine cultural ideas about time as a means of critiquing the Ministry of Education (2009) achievement goal: ‘Māori enjoying and achieving education success as Māori’. I argued that as time is integral to, and an expression of, culture, time is therefore significant to the possibilities for Māori learners succeeding ‘as Māori’.

The educational ideal ‘Māori enjoying and achieving education success as Māori’ requires a fundamental shift and revision of educational practices. Western time is the most obvious, and at the same time, the most taken for granted, barrier to Māori education success ‘as Māori’. Time in New Zealand schools is a manifestation of the priorities in Western culture and society, and through daily exposure, Māori learners are accustomed to Western time and assimilated into Western cultural beliefs and values. Over time, Māori learners, like all learners in New Zealand schools come to accept that Western time is time per se.

Western worldview has a taken for granted dominance and time is an example of this dominance. From the establishment of the Native Schools, generations of Māori learners have been educated in contexts that validate Western cultural identity. It is not difficult to see that Western time, in the way it is structured and used, and the associated educational practices, have had a profound influence over generations of Māori. In these educational settings there are few opportunities to learn about or experience *wā* in cultural contexts such as *pōwhiri*. There are few opportunities to learn about the past – histories that are relevant to Māori learners as opposed to histories that have no relevance and do not validate Māori identity. There are few opportunities to experience cyclical, relative *wā* or to think of time as anything other than fixed or quantified. All of these aspects of *wā* are integral to a secure Māori identity.

The challenge presented in *Ka Hikitia* for the education sector is about a shift in orientation toward Māori, and a willingness to engage with Māori in a way that acknowledges and values *wā* and therefore Māori knowledge, *te reo Māori* and

tikanga Māori, all of which strengthen Māori identity. A shift away from deficit, failure, and disadvantage is a critical first step toward something different in terms of education for Māori learners. Without such a shift in mindset, it is difficult to accept different perspectives on time or to acknowledge the potential of culture and cultural pedagogies to enhance an out dated education system.

Tai Wānanga and Te Whānau o Tupuranga are modelled on *wā*. These schools are relative, qualitative and dynamic in their approach to teaching and learning and emulate many traditional Māori educational practices. Tai Wānanga and Te Whānau o Tupuranga have created learning environments that allow Māori learners to experience and practice *te reo Māori* and *tikanga Māori*, and to engage in learning experiences that enhance their identity as Māori on a daily basis. They are able to do this because they are prepared to question the fundamental assumptions upon which education in New Zealand schools are based. Exploring possibilities has led these schools to discover rich ideas and innovative ways for thinking about education for Māori learners. Both schools use time differently. Time is not a mechanism of control; time is given to cultural practices such as *pōwhiri* and *whanaungatanga*. Timetables are not fixed or used to compartmentalise learning; learning programmes are personalised to meet the needs and the interests of learners.

Final word

If we return to Durie's (2003) statement that "education should be consistent with the goal of enabling Māori to live as Māori" (p. 199), then we need to look no further than *wā*. *Wā* is fundamental to living as Māori: *wā* is integral to *te reo Māori* and *tikanga Māori*; *wā* is the key to knowledge - knowledge about the past, the natural environment, when and how to set out *maara*, how to treat illness, and *mātauranga Māori*; and *wā* underpins traditional educational practices and pedagogies. *Wā* in short, is fundamental to a secure Māori identity.

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