He Huarahi Ako: Pathways to Learning

The academic and cultural self-efficacy of Māori student teachers

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Me Tu Au

Me tu au ki te mihi
ki ngā iwi o te motu
ki ngā waka kua eke mai
ki runga i te taonga e tū nei
Te Kupenga o te Mātauranga
nōna hoki te reo karanga haere mai

Tuatahi me mihi
me tangi ki ngā mate
o te wiki
te marama
te tau
Haere hoki koutou
ki te iwi nui i te po ..e... i

Tuarua me mihi
ki te marae
te whenua
ki ngā maunga
ngā takahanga o ngā mātua tīpuna
me ō rātou awa tapu
e rere nei ...e...i

Kei te hoki whakamuri
aku whakaaro e hoa mā
ki te reo wairua tangata
nāna te kōrero
E hoa Witiwira
anei te kākano
whakatipua mai e koe
mei kore tipu hei whakamana mai
hei whakatiketike
i taku mana Māori motuhake ...e...i

Ka nui taku hari e ngā iwi
kua rite hoki
taku wawata me taku moemoeā
i taku rākau nui
rākau kaha
rākau aroha
ki ngā iwi o te motu
mō ake tonu atu...e...i

Nā te kuia nei, nā Huia i tito tēnei waiata mō te whakatūwheratanga o Te Kupenga o te Mātauranga 1980

The pattern used on the cover of this thesis is called He Taura Tangata; it is the first heke in Te Wharenui: Te Kupenga o te Mātauranga. It was painted collectively by the first groups of Māori Studies student teachers.

HE MIHI

I runga i te ngākau aroha, he mihi tēnei ki a tātou katoa, ki ngā morehu o rātou mā kua takahi atu rā i te ara wairua. Kei te mihi ake rā ki a rātou kua huri kē atu ki tua o te ārai, kua mene ki te pō. Nā rātou i waiho a rātou tāonga hei miharotanga mā tātou, hei kawenga mā tātou ki roto i nga tau 2000 neke atu. Tēnei te mihi. Ki a koutou aku tūpuna, e te kuia, e te whāea, kei te tangi tonu te ngākau mō koutou. Ki ngā rangatira nā rātou i poipoi ngā kaupapa i Te Kupenga o te Mātauranga, e Te Kārauna Whakamoe, kōrua ko tō hoa ko Aunty Huia, kei te mihi tonu mātou, kore rawa e wareware i a matou. Ki taku rangatira ki a John Tapiata, kua puāwaitia oū whakaaro. Nāu tēnei mahi i timata, ko to wairua kei te mau tonu. E hika, kei te tangi tonu.

Ko te Hokowhitu a Tū te papa e tākoto ake nei tēnā koe. Ko te whare a Te Kupenga o te Mātauranga, tēnā koe, e tu e te whare, kōrua ko tō piringa a Te Haonui. Ki ngā kaitiaki o te kainga nei tēnā koutou, tēnā koutou, tēnā koutou katoa. Ki a Kui Rangi Tamehana, kōrua ko Koro Bob Tamehana, he mihi tēnei ki a kōrua ō tātou kaumatua, nā kōrua mātou i arahi i ngā tikanga ā o tātou tūpuna. Ki ngā Pou o Te Kupenga o te Mātauranga ki a Kahu Sterling kōrua ko Mereheni tēnā kōrua, tae atu hoki ki a Peti Nohotima me Henare Green. Nā ō koutou whakaaronui ki te marae oTe Kupenga o te Mātauranga kei te ora tonu, ā kei te kaha tonu tōna kaupapa ataahua. Nā reira kei te mihi tēnei iti nei.

He mihi hoki tēnei ki aku kaitautoko, kaitirotiro i tēnei rangahau, tēnā kōrua. Ki a koe Ian Christensen mō to āwhina, me to kaha ki te tautoko i ahau i roto i tēnei mahi, e hoa ka nui te mihi. Ki a koe Colin Gibbs mō tē taha ki te mātauranga o te ao whānui, kei te mihi, mō tō kōrua kaha ki te kawe i ngā tikanga o tēnei momo tuhinga, kōrua tahi i āwhina i ahau ki te whakatutuki i tēnei kaupapa.

E te rangatira, e Meihana, e mihi ana ki a koutou katoa o Te Pūtahi-a-Toi, nā koutou i tautoko mai te kaupapa rangahau nei. Tēnā hoki koe Esther me tōu rourou āwhina i te taha ki te rorohiko. Tēnā koutou tēnā koutou katoa.

E te komiti whakahaere pūtea mō te rangahau ki Te Kupenga o te Mātauranga e mihi ana ki a koutou, nā koutou i tautoko mai tēnei mahi, na reira aku hoa mahi tēnā koutou.

Ko te kōrero whakamutunga ka hoatu ki ngā tauira i whakaae mai ki taku tono, nā ratou i tautoko tēnei rangahau, tēnā koutou katoa. Kei te mihi ki a koutou i hōmai a koutou kōrero ki ahau hei hāpai i tēnei mahi. Ka nui te mihi e kare mā. Ko te tūmanako kei te tika tonu taku kawe i a koutou kōrero.

Kāore kau he kōrero tua atu i taku whānau, taku whānau tuatahi i pakeke mai ahau, taku hoa rangatira me aku tamariki. Nā tō koutou tautoko i oti i ahau te kaupapa nei. Ki taku hoa rangatira ki a Eljon ka nui te mihi e hoa, tō kaha hoki ki te tautoko i ahau, ki te tiaki i ngā tamariki i ahau e mahi ana, tēnā koe. E hika, kua oti tēnei moemoeā. Tēnā koutou, tēnā koutou, tēnā koutou katoa.

Nāku noa iti nei
nā Frances.

BACKGROUND INFORMATION ABOUT THE RESEARCHER

It is important that I share with the reader my background, and some of the life experiences which have led me to this topic. I am of Ngāpuhi and Ngati Hine descent, my father from Ngāpuhi and my mother from Ngāti Hine. Both my parents were born and lived their early years in the far North of New Zealand.

My father had an upbringing typical of post-war families, and was one of eleven children, raised on family land which was partly bush clad, close to Kaeo. His father was of English stock, and his mother was of Māori and Scottish ancestry. Both were hard-workers but died before their grandchildren were born. Their farm was a fair distance from their mother's marae which meant they did not go there often. When my father was old enough, he left the farm and found work as a freezing worker in Hawkes Bay, where he settled.

My mother's parents were both of Ngāti Hine descent, and she was the oldest of eleven children. She was born in Awarua and was fortunate to spend her early years being brought up by her grandparents. Her first language was Māori. Later, her family moved to Hastings in search of work . This move, coupled with being members of the Mormon Church, meant a time of challenge and contradiction as my mother's family sought ways to survive in a city far from their tūrangawaewae (place). My parents met in Hastings and it was there they also decided to settle.

My brothers, sisters and I were all born and bred in Hastings amidst high employment, which consisted mainly of seasonal and unskilled labour. It was also during the time of Māori migration from rural areas to the cities. Most of those who were not from Ngati Kahungunu (the local tribal group) were able to recite their tribal histories and, as Dad recalled, there remained a fiercely staunch tribal pride. However, as time progressed, the strength and links with their tribes became less evident as city life took over.

Ranginui Walker in his book *Ka whawhai tonu matou* describes the context in which I grew up:

> Ethnicity, cultural difference and the experience of being colonised impelled the Māori to dwell in the dual world of biculturalism or surrender to the Pākehā imperative of assimilation. While some Māori chose assimilation,

> the vast majority rejected it. That meant commitment to cultural continuity...In the early stages of urbanisation, migrants maintained contact with their cultural roots by occasional visits to their kainga and marae for holidays, weddings, tangi and unveilings of headstones. But gradually, as the migrants became more sure of themselves, they put down roots and planted their culture in new ground (Walker, 1990, p.198).

My brothers, sisters and I were the first urban generation, born and bred hundreds of miles from cultural roots and in the midst of aggressive assimilatory and integration policies which were to make us more Pākehā and less Māori. Our schooling during the 1960s was similar to that of every other school child across New Zealand living in a city. There was little recognition of us being Māori, except for the school Māori club of which I was a very proud member. Initially I never felt any real connection or sense of belonging to school; until I reached secondary school, where in the fourth form Mum and Dad sent me to Saint Joseph's Māori Girls College in Greenmeadows. There I was able to thrive and began the Māori education journey of which I am now a part.

After Saint Joseph's, I trained as a teacher at Palmerston North Teachers' College. For me it was a transfer from the St Joseph's whānau to the Palmerston North Māori Studies' whānau, and under the tutelage of John Tapiata I was able to flourish. In hindsight, as a young Māori woman growing up I feel privileged to have been part of the many rich and rewarding experiences gained in both these institutions and in the type of constant and consistent support I received from my whānau.

After some years teaching, I returned to the College of Education as a lecturer teaching Professional Studies and working with mainly Māori student teachers in a self-selected whānau group. The impetus for this thesis, then, has come from not only my own personal background and experiences but also from the Māori student teachers whom I have worked with. My experience both as a Māori student teacher, teacher, and teacher educator, therefore, has shaped my contribution to this study.

Nā reira e te iwi
Tēnā koutou, tēnā koutou katoa.

ABSTRACT

The present study sought to investigate the factors that affect Māori student teachers academic and cultural self-efficacy in a teacher education programme. Identifying these factors is considered important for developing appropriate teacher education programmes to better provide for this increasing population of student teachers. The target sample goup are Māori student teachers who are enrolled in the general teacher education programme at Te Kupenga o te Mātauranga. Underpinning the development of these student teachers lies an expectation that they will provide Māori input in general education schools and programmes, based mainly on the fact that they are Māori. Ensuring that these student teachers are therefore culturally competent to do so is important if success is to be achieved for themselves personally, for Māori and for New Zealand society. A framework has been developed to assist in examining important Māori concepts in relation to teacher education. The development in Kura Kaupapa Māori teacher education programmes has meant that the pool of more culturally competent Māori student teachers has been absorbed into those programmes. There remains, however, a commitment to Māori student teachers in general teacher education to continue achievement in both Te Ao Māori (the Māori world) and Te Ao Whānaui (the wider world).

This study analysed two kinds of data; a survey (of 24 student teachers) and formal interviews (of four of the survey participants). Quantitative analysis were integrated with qualitative data from the interviews.

In identifying factors that affect the academic and cultural self-efficacy of these student teachers it became clear that their sense of collective efficacy was highly influential in both contexts. In the academic context however, it was given lesser emphasis than in the cultural context, as work in the academic context in the main required them to work independently. These student teachers were more inclined to work in groups, to support each others learning and to discuss tasks amongst themselves. These factors tended to develop in them a stronger sense of collective efficacy. Student teachers who had come straight from school with formal qualifications (Bursary) generally displayed higher levels of academic self-efficacy. However, many had entered college with other qualifications such as work experience or suitability for teaching and tended to have lower levels of self-efficacy in the academic context. While the majority of these student teachers claimed to be capable learners, most also claimed the need to develop skills and strategies that could help them in both the academic and cultural contexts.

Achievement in Te Ao Māori (the Māori world) was for all of these student teachers a key issue. Yet, most expressed quite low levels of self-efficacy in this context. In particular, these low levels of self-efficacy were related to their competency in Te Reo Māori and Tikanga. Having high self-efficacy is said to provide higher levels of effort and perseverance in activities (Bandura, 1986). Despite having generally lower levels of self-efficacy for Te Reo Māori and Tikanga, these student teachers showed persistence and motivation in learning about their own culture. Te Reo Māori, Tikanga and Whānau proved to be key sources in the development of these student teachers' cultural self-efficacy.

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kia rite taku moemoeā

INTRODUCTION

Maori teacher education has progressed significantly in the last thirty years. In the late 1960s it was at best, an add-on subject approach about Māori people. Three decades later its most progressive development includes some programmes being taught entirely in Māori. For some student teachers however, only a small proportion of their programme incorporates Māori content. While developments in Māori teacher education have progressed, the majority of Māori remain in programmes that are essentially monocultural and euro-centric in content and structure (Penetito, 1991). This is in a sense at odds with Māori aspirations as they have had to grapple with the loss of their language and culture. In order to deal with this loss Māori teachers have become key players in ensuring language and cultural survival. Increasingly there is an expectation not only by the Māori community but by the non-Māori community also, that Māori teachers are bicultural. As such these teachers are expected to become community leaders not only equipped with Māori knowledge but with Pākehā knowledge as well. One important characteristic of Māori teachers, Penetito (1995), suggests is that 'they will know what being Māori means'. Crucial to fulfilling these goals however, will be the degree to which these Māori student teachers believe they are capable of doing so. Bandura's self-efficacy construct has been employed in this study to examine whether it has potential in explaining the characteristics of Māori student teachers in both an academic and cultural context. Bandura proposed that "perceived self-efficacy refers to beliefs in one's capabilities to organise and execute the courses of action required to manage prospective situations" (Bandura, 1986). Efficacy beliefs, he argues, influence how people think, feel, motivate themselves and act (Bandura, 1995). Furthermore, he concluded that essentially people's self-efficacy beliefs help determine how much effort they will expend on an activity, how long they will persevere when confronting obstacles, and how resilient they are in the face of adverse conditions (Pajares, 1996; Schunk, 1996; Bandura, 1986, 1989, 1990). In essence, he proposed that the higher the sense of self-efficacy, the greater the effort, persistence, and resilience; conversely, the lower the individual's

self-efficacy the more these outcomes are reversed. Identifying and understanding what factors affect Māori student teachers' self-efficacy beliefs in an academic and cultural context for Māori formulates the basis of this study. Penetito (1996) suggest, that, in meeting the challenges of two cultural worlds, these student teachers need to be adequately knowledgeable and skilful in two worlds. This has implications for teacher education programmes as it is these which are and will continue to be at the cutting edge in enabling Māori student teachers to achieve a high level of proficiency in both contexts. Continually challenged to meet these demands, Walker (1990) refers to the plight of these Māori teachers as a walk between two worlds.

Māori educators, parents, and society have worked particularly hard over the last two decades to ensure better educational outcomes are achieved for their people. As a result, there has been an unsatiable demand for qualified quality Māori teachers. This demand has been fuelled on two fronts. The first has come from a desire to put a halt to the poor levels of academic attainment of Māori children. Second, there is a perceived urgency about the need to halt the loss of Māori language and culture. In recent years there has been a Māori education explosion in response to these concerns. While progress has been made on both fronts, there still remains a sense of urgency for its continuing development. Two kinds of initiatives have emerged- namely Māori education initiatives, and Māori in general education initiatives (International Education Congress Report, 1995). Māori educational initiatives have focussed primarily on Māori language and culture, whānau involvement and Māori learning and teaching methods, and include Kohanga Reo, Kura Kaupapa, Immersion Classes and Whare Wananga. General education initiatives have focussed primarily on the education of Māori children within the general education sector. Worth noting is the fact that Māori children make up the greatest increases in school-aged children in the general education sector. Between 1976 and 1993 there was a 21% growth in the primary school-based population of Māori children and in secondary schooling there was a 40.3% growth. For non-Māori, there was a decrease of 26.0% in primary school and for secondary school, there was an 8.5% decrease (International Education Congress Report, 1995).

Currently, teacher education for both Māori education initiatives are catered for at Te Kupenga o te Mātauranga - the site of the present research study. In December 1997, 22 student teachers graduated from Te Tohu Pokairua (Kura Kaupapa programme) and 25 from the on-campus general primary teacher education programme (non-Kura Kaupapa), from Te Kupenga o te Mātauranga. Te Tohu

Pokairua student teachers are primarily focussed on educating Māori children in Māori and therefore provide for the much needed teacher resource base in Kura Kaupapa Māori. The general education student teachers, however, are not only charged with teaching Māori children but also teaching children from the diverse backgrounds that make up New Zealand society. Hence meeting the demands of the national curriculum statements as well as the expectation to contribute to the growth and development of Māori language and tikanga is the challenge facing these student teachers. This present study, therefore, focuses on Māori student teachers who are in the general teacher education programme, and is concerned with identifying factors that affect their academic and cultural self-efficacy.

Mitchell and Mitchell (1993), in their study of why Māori teachers leave the classroom, provide some valuable insights into the classroom realities for Māori teachers. For teacher educators, understanding the issues so that student teachers may be better prepared for these situations is important, if only to stop the exit of these much needed teachers. One of the problems identified in the Mitchell report was the expectation that Māori teachers carry 'kaupapa Māori' regardless of whether they feel capable to or not. The increasing community demand for teachers who are capable in both Te Ao Whānui (the western world) and Te Ao Māori, (the Māori world) quite often assumes that Māori teachers are fluent and conversant in both worlds. Ofentimes they are not. Figures from the latest Te Taura Whiri i Te Reo Māori survey held in 1995 highlighted the severity of the loss of language conferring that as few as only 13.7% of the Māori population could speak Māori reasonably fluently.

Māori student teachers who chose to be part of Te Tohu Pokairua programme generally tend to be more culturally fluent and conversant[1] than Māori student teachers who opt in to the general teacher education programme. Equipping Māori student teachers in the latter programme with cultural knowledge and skills remains imperative, not only for personal reasons but for their professional lives as well. This is not easily achieved, however, especially if these student teachers have not had access to Māori language and culture. Understanding and catering for these student teachers diverse realities presents one focus of this study. It should be noted that this study does not consider a comparison between Māori student

[1] The staff of the Tohu Pokairua programme (Peti Nohotima and Blackie Tohiariki, both of whom had taught in the general education programme before the introduction of the Tohu Pokairua programme), agree that these student teachers are on the whole more culturally fluent and linguistically competent than those Māori in the general teacher education programme. However, they noted that there have been general education programme student teachers who would have been capable candidates within Te Tohu Pokairua programme had it been available in the past.

teachers and non-Māori student teachers; it is comparative not across cultures but across individuals. As we move into the next millennium, Māori are keen to reconstruct themselves and measure themselves against themselves.

The study recognises that the ecological context including physical settings and circumstances, temporal relationships and associations, and spiritual awareness is important for Māori. Therefore, a framework has been developed which specifically targets essential Māori cultural values, which for the purposes of this study have been identified as: Te reo Māori (Māori language), Tikanga, (customary practises), Kaupapa Māori (Māori politics), Ako (learning and teaching), Whānau (relationships), and Wairua (Māori well-being). Māori frameworks have been increasingly used by Māori researchers and commentators to explain the interconnected nature by which Māori operate (see for example, Durie, 1985a, 1994; Irwin, 1992; Pere, 1984, 1991).

Bandura's four sources of self-efficacy assisted in the design of the questions for identifying the academic and cultural self-efficacy levels of the sample group. These items have been tested in a number of other studies (e.g. Bandura, 1977, 1986, 1993; Bandura & Jourden, 1991; Markus & Kitayama, 1991; Hofstede, 1989, 1991; Oettingen, 1995; Triandis, 1989; Triandis et al, 1990; Schunk, 1989, 1991, 1996; Zimmerman, 1995;). A cultural framework using a combination of efficacy and epistemologically appropriate concepts was used to gauge Māori student teachers' self-efficacy within the cultural context.

The context of the study

This study is concerned with Māori student teachers in their first year of teacher preparation at Te Kupenga o te Mātauranga. The main aim of the study is to identify factors that affect Māori student teachers' academic and cultural self-efficacy. With increasing numbers of Māori students now entering the teacher education programme, expectations about their cultural knowledge and competence may, at times, be over-estimated. This study explores these student teachers' academic and cultural self-efficacy as a measurement for determining the student teachers' capabilities within a non-Māori academic context and a Māori cultural context.

Having spent some years working with student teachers in combination with the challenging and changing tertiary environment, it was considered important to seek evidence about these Māori student teachers' academic and cultural self-efficacy.

This study is set amongst a raft of rapid educational change, both institutionally and nationally. This year, 1997, the Palmerston North College of Education merged with Massey University. A favourable outcome for Māori within this change has been the establishment of a Māori and Multicultural Education Department as one of the three academic departments set up within the newly formed College of Education. Ensuring that these changes do not adversely affect this student population is an important consideration, and researching factors which affect these student teachers can help inform future decisions, within both the Department of Māori and Multicultural Education and the wider university.

For these Māori student teachers, understanding their beliefs about their capabilities in Te Ao Māori (Māori world) and Te Ao Whānui (western world) is particularly important, especially as many of them, or their parents, were products of the policies of assimilation and integration which characterised Māori upbringing in the 1950s and 1960s (Walker, 1990). As a consequence, reality for the majority of Māori student teachers within the general education programme means being reintroduced to their Māori world. This has proved to be rather complex as some student teachers exhibit characteristics of limited cultural capital in both Te Ao Māori and in Te Ao Whānui.

It is important, as we approach the year 2000, that Māori teacher education is developed according to a coherent, and culturally-relevant plan. This should serve Māori cultural purposes as well as social, educational and political purposes. Education is a key element in Māori development, and teacher education is pivotal in this regard. This study hopes to contribute information that will help Māori achieve the goals of cultural, social, economic, educational and political well being. This should mean greater involvement by educational institutions moving toward working in partnership with Māori tribal and community groups.

Another important aspect in the development of Māori teacher education is identifying appropriate Māori pedagogical practices. To do so, will help Māori articulate better their needs and aspirations as a basis for their future development and advancement. It is imperative, however, that this development is based on strong philosophical grounds that are both culturally and educationally appropriate. Such is the case for Te Aho Matua which is the philosophical document that underpins Kura Kaupapa Māori. In the Ministry of Education's review of teacher education in New Zealand (October 1997), several strategies were proposed for Māori teacher education. Unfortunately, the proposed strategies lacked commitment

to a philosophical position. Furthermore, the review did not clarify what would happen to Māori student teachers who were in general teacher education programmes. A brief overview of Māori approaches to education and research are included in the literature review.

As a researcher, concern about becoming just another voice adding to the rhetoric of what some claim to be Māori education perspectives was an important consideration, therefore it was important that this research have the potential to contribute to Māori education development in ways that are empowering and purposeful. As such, the study has been set in what the researcher considers to be appropriate Māori structures and approaches. This includes using an integrated holistic approach and wide consultative practices, consistent with tikanga Māori. Finding a theoretical position that encapsulated a holistic approach, and encompassed particular cultural perspectives away from a Western perspective was therefore a crucial consideration. Bandura's' social cognitive theory of self-efficacy was considered to fulfil the above criteria as it could be used within any context to explain individual's behaviours.

The other exciting appeal of this theory was that it has been used extensively within a number of countries and within a number of situations. Furthermore, the ability to offer strategies for improving or enhancing the self-efficacy of research participants was possible. To date, there is a dearth of research about Māori student teachers or Māori self-perceptions, and Banduras' theory of self-efficacy offers an appropriate approach to filling the gaps.

This study, therefore, attempts to push further the boundaries of knowledge about a particular group of people within a particular structure using appropriate and relevant methodologies to inform practice. Furthermore, it proposes a framework for Māori teacher - education development by which the researcher can view the findings from a Māori perspective. Chapter two reviews the literature as it relates to self-efficacy and its utility within this study and He Huarahi Ako: Pathways to Learning, a Māori teacher education framework, is also presented. Following this chapter, a brief overview of Māori education is presented which places the study in its historical context. Chapter three outlines the methodology of the study. Chapter four presents the results and, chapter five a discussion of the results as they relate to the research question. Finally, the conclusion and outcomes from the study are presented.

A final word in introducing this study I leave to Rangimarie Rose Pere (1982, p.1)

> People who are classified as 'Māori' today are in fact made up of individuals who derive their identities and experiences from tribal and sub-tribal groups, urban groups, other cultures, etc... The diversities among peoples of West European origin themselves significant in educational practice; how much greater must that diversity be for people whose origins were in a very different culture from Europe but whose recent history has been increasingly intertwined with it. In practical terms to ignore the diversity is largely an administrative convenience (cited in Benton et al, 1995).

We can ill-afford to ignore this diversity, but first we must understand it. Being firmly grounded in one's own tribal and cultural knowledge is an important aspect of cultural identity and can be empowering in a continually changing and challenging global environment. Unfortunately the reality today is that many Māori are not culturally proficient, and it has become an increasing scenario that university is sometimes the first point of contact of culture for some Māori students. Arohia Durie articulates the role of The Māori lecturer in working with Māori students. She says that Māori students "need access to every knowledge base that has the potential to empower them as individuals and their whānau, hapu and iwi collectively," (He Pukenga korero, 1995, Koanga).

This chapter started with a waiata (song) written by John Tapiata for the opening of Te Kupenga o te Mātauranga marae for the forthcoming generations of student teachers. It tells them of the importance of what Te Kupenga offers but more importantly at whom this new knowledge is directed.

Let us go to Te Kupenga
to seek the knowledge
a tool for our people
so that our dreams may be fulfilled

CHAPTER TWO

E tipu e rea, mō ngā rā o tō ao
ko tō ringa ki ngā rākau a te Pākehā, hei oranga mō tō tīnana
ko tō ngākau ki ngā taonga a oū tūpuna hei tikitiki mō tō māhunga,
ko tō wairua ki te Atua nāna nei ngā mea katoa

REVIEW OF LITERATURE

This chapter is divided into four sections. The first section reviews the literature relating to academic self-efficacy, and the utility of self-efficacy as an explanation for behaviour within an academic setting. The second section reviews the literature as it relates to the studies proposed framework, He Huarahi Ako. The third section reviews the literature as it relates to cultural self-efficacy, and culture within an education context. The final section relates to the wider context of Māori education and issues of research.

Academic self-efficacy

Bandura (1995) suggests that

> a major goal of formal education should be to equip students with the intellectual tools, efficacy beliefs, and intrinsic interests to educate themselves throughout their lifetime. These personal resources enable individuals to gain new knowledge and to cultivate skills either for their own sake or to better their lives.

According to Bandura (1995), and he is supported by other writers, efficacy beliefs are a key factor in the development of self-directed lifelong learners. Albert Bandura's work has been instrumental in developing the construct of self-efficacy as an explanation for people's behaviour. Self-efficacy has been claimed to have utility in helping explain people's behaviour across a number of contexts and domains. Within the academic context, it is claimed that efficacy beliefs affect students' beliefs in their capabilities to master academic activities, their level of interest, their academic accomplishments, their aspirations, as well as how well they might prepare themselves for different occupational careers (Hackett, 1985, 1995; Holden, Moncher, Schinke, & Barker, 1990; Schunk, 1989; Zimmerman, 1995). This present study attempts to engage some of these claims in relation to Māori

student teachers. This includes the consideration of how efficacy beliefs affect Māori student teachers' performance within a teacher education preparation programme.

The utility of self-efficacy as an explanation for the academic and cultural behaviour of student teachers has wider implications. Perhaps the most important is that developing a high sense of self-efficacy in student teachers is likely to lead them to developing high self-efficacy as teachers. This, in turn, should help them become more effective teachers. Research has shown that children who have teachers who doubt their ability as teachers will in turn grow to doubt their own capabilities. Instilling in student teachers a high level of self-efficacy as well as providing them with the necessary skills and strategies to raise their levels of efficacy is likely to be beneficial not only to themselves but also to the students that they will teach during their careers.

What then is self-efficacy? Bandura originally used the term self-efficacy to explain the coping behaviours of people in fearful situations but more recently saw it as a useful description for explaining student behaviours in academic settings (Bandura, 1995). He coined the term self-efficacy to bring together all the research on the self system, which primarily included the terms: self-esteem, self-concept, achievement motivation, intrinsic motivation, locus of control, and learned helplessness (Bandura, 1989). Simply put, self-efficacy is one's beliefs about one's capabilities to perform a particular task. Bandura (1986) claimed that self-efficacy is important as it helps determine what tasks and what risks a person will take. Such decisions are said also to help govern persistence and, therefore, ultimate success in performance attempts (Bandura, 1986).

Schunk (1991) added

> self-efficacy develops from the appraisal by individuals of their performances. Therefore how individuals perceived their ability, the difficulty of the task, the amount of effort they expended, the amount of external assistance received, the number and pattern of successes and failures, their perceived similarity to models, and persuader credibility (pp. 208-209).

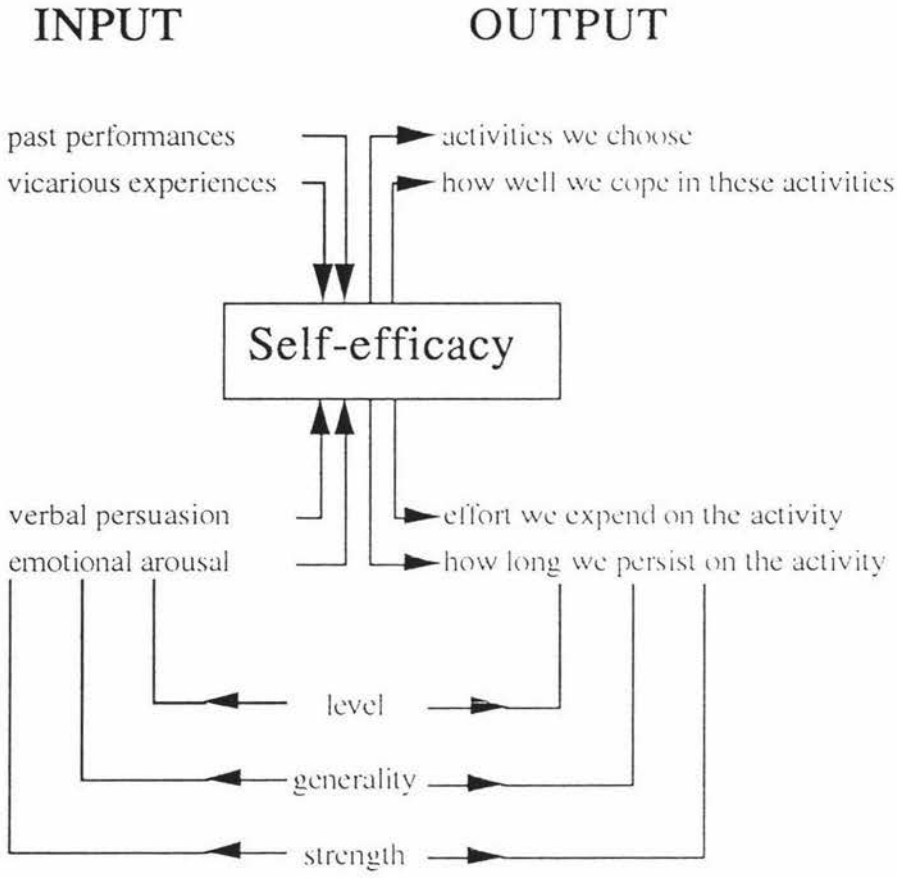

Figure 1. Main sources of self-efficacy (input) and corresponding possibilities (outputs) (Schunk, 1990)

Schunk (1996) claimed that self-efficacy for learning depends on a range of factors such as 'prior experiences, personal attributes (e.g, abilities, skills), and environmental/social supports.' (p. 6). He contends that as students work on tasks they gather information about their learning which, in turn, causes them to appraise their efficacy for future learning. Gathering data relevant to Māori student teachers' prior experiences, personal attributes and abilities, skills and environmental and social supports provides valuable information about their self-efficacy within in a learning environment. Figure 1 outlines the sources of self-efficacy and how this then might affect student outcomes (Bandura, 1986). Bandura (1986) suggests there are four main sources of influence on self-efficacy. Each influences a person's self-efficacy individually and collectively. Figure 1 represents diagrammatically the flow of self-efficacy seen as entry points or input sources. These input sources are then internalised and affect the strength, generality, and level of a person's self-efficacy. In turn, this impacts on what a person's output might be. According to Bandura (1986), how people behave can often be better predicted by their beliefs about their capabilities than by what they are actually capable of doing. The key

point is that these beliefs help determine what individuals do with the knowledge and skills they have. In this regard Figure. 1 conceptualises self-efficacy and how it might be used to explain the academic and cultural behaviour of Māori student teachers.

Sources of self-efficacy

Students acquire information to appraise their self-efficacy from four main sources. These are: past performance accomplishments, vicarious experiences, verbal persuasion and emotional arousal (Bandura, 1986).

Performance accomplishments

Of the four sources, performance accomplishments are believed to have the most powerful influence on self-efficacy (Bandura, 1986). Successful performances are said to culminate in the student developing strong self-efficacy, and poor performances culminate in low self-efficacy. Thus, success raises self-efficacy and failure lowers it. If early performances have been successful, the likelihood of lowering self-efficacy with failure later is less likely (Bandura,1986). Because entry into the teacher preparation programme is based upon selection, those Māori student teachers in the present study have already established performance accomplishment in this regard. This, in turn, might affirm their sense of self-efficacy.

Vicarious Experiences

Observing others and making social comparisons between themselves and others who they consider to be similar to themselves has an influence on students' self-efficacy. Students who observe similar peers perform a difficult task are apt to feel more efficacious because they believe, they too, are capable of accomplishing it (Schunk, 1989). Bandura and Jourden (1991) claim that people's appraisal of their efficacy is strongly influenced by social comparisons. Information acquired from vicarious sources, however, is claimed to have a weaker effect on self-efficacy than performance-based information. If performance difficulties persist, vicarious sources will be negated (Schunk, 1996). In educational contexts where academic performances are subjected to a great deal of modelling and comparative evaluation of others' successes and failures students' self-efficacy and motivation through perceived similarity can be greatly enhanced.

Verbal Persuasion

Verbal persuasion is information that students receive from teachers, parents, or others. If students are given positive or encouraging comments their self-efficacy is enhanced, whereas negative or discouraging comments tend to lower self-efficacy. Schunk (1996) warns, however, that high self-efficacy gained through verbal persuasion will be temporary if effort turns out poorly. For example, telling someone that they are capable of achieving may increase self-efficacy. However, if their results indicate otherwise they will tend to think that no matter how hard they try, they are not capable.

Emotional arousal

The fourth and final source of self-efficacy is emotional arousal gained mainly from physiological aspects. Bandura (1993) claimed that efficacy beliefs to manage academic task demands influence emotional states, such as stress, anxiety, and depression. A person who shows symptoms of anxiety such as increased heart rate or sweating might be interpreted as lacking skills to deal with a task, suggesting therefore a low self-efficacy. On the other hand, a person who engages in a task free from anxiety and feeling of being in a threatening situation is claimed to be more self-efficacious.

In social cognitive theory, perceived ability to control potentially threatening events plays a central role in anxiety arousal and coping behaviour. Because anxiety has both cognitive and physiological aspects (Morris & Liebert, 1970), it can intrude on and impair intellectual functioning. There is evidence that students' performance in academically threatening situations depends more on self-efficacy beliefs than on anxiety arousal. As regards anxiety, Bandura (1986) suggests that it is only when people cannot predict or exercise control over events that they have reason to fear them. Anxiety is therefore generally determined by the confidence individuals bring to a task. Efficacy beliefs predict 'how well people cope with threats and how much fear arousal they experience' (Bandura, 1986, p. 321). Self-efficacy will retain predictiveness of performance even when the effects of anxiety are controlled, whereas the effect of anxiety should dissipate when self-efficacy precepts are controlled. Cognitive activities and emotional states are therefore connected.

> Contemporary neuroscience shows that when we engage in routine activities not only are the neural networks activated that involve prior cognitive learning (i.e., neural connections to the cerebral cortex), but that neural connections to our emotional states at the time of initial learning are also

activated (i.e., neural connections to the limbic system). Thus, our repetition of certain customary activities evokes and reinforces emotional feelings as well as thoughts and skills (D'Andrade & Strauss, 1992).

Learning is a profoundly emotional activity as well as a cognitive one. This reinforces the view that a person's emotional arousal state is indeed a valid source of measuring self-efficacy.

Measuring academic self-efficacy

Bandura (1986) noted that information acquired from the four sources does not automatically influence self-efficacy, but rather it goes through a process of cognitive appraisal. This process involves the learners weighing up and combining the contributions of other factors such as perceptions of their ability, task difficulty, amount of effort expended, amount and type of assistance received from others, perceived similarity to models, and persuader credibility (Schunk, 1989).

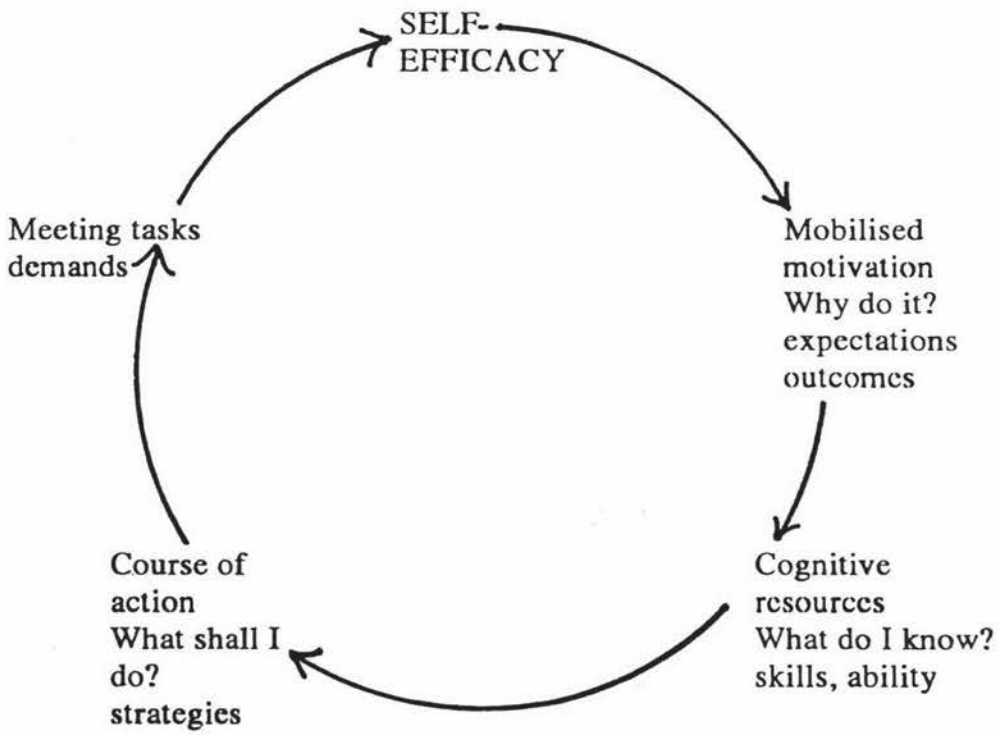

Figure 2. An example of how self-efficacy may be enacted by students while completing an academic task[4].

By 1990, self-efficacy had been expanded to include students' beliefs in their capabilities to mobilise the motivation, cognitive resources, and courses of action

[4] The source of information from this figure is developed from Schunk, 1990.

needed to exercise control over task demands' (Schunk, 1990). Figure 2 represents the relationships between self-efficacy and the interplay of motivation, cognition, and how strategies are developed to enable an individual to reach their goal of fulfilling a task.

Bandura (1977, 1986) developed scales to measure perceived academic efficacy. The three factors he considered important in the assessment of self-efficacy included, level, generality, and strength of ones self-efficacy. Levels, he described as variations across different levels of tasks, such as increasingly complex writing tasks. Generality, he described as the transfer of self-efficacy beliefs across academic activities or across different curriculum areas. Strength, he described as individuals' certainty that they can perform given tasks. In this present study, these three areas are assessed, that is the level, generality and strength of Māori student teachers' self-efficacy within an academic and cultural setting. Bandura cautions researchers that self-efficacy beliefs should be assessed at the optimal level of specificity that corresponds to the criterial task being assessed and the domain of functioning being analysed (Pajares, 1996). This present study attempts an optimal level of specificity within the academic context by focussing specifically on one of the student teachers' courses within their programme.

In assessing self-efficacy, Zimmerman (1995) suggests a number of contributing factors:

- Judgements of capabilities to perform activities rather than personal qualities.
- Efficacy beliefs are multi-dimensional rather than single dispositional. For example, students may have a stronger self-efficacy belief in reading than in mathematics.
- Self-efficacy beliefs are context dependent. For example, some students may do better in a competitive environment rather than a cooperative one.
- Meaning is measured on how difficult the task was, not on how well others did.
- Self-efficacy is measured before the relevant activities are executed, as well as afterwards, as performance accomplishment affects self-efficacy (Zimmerman, 1995).

Collective self-efficacy

Collective self-efficacy is 'a group's shared belief in their capabilities to realise given levels of attainment', (Bandura, in press). Collective efficacy is a social learning cognitive theory developed from collective systems such as classrooms, teams of

teachers, schools, etc.. A sense of collective efficacy, including confidence, is both a personal and social construct (Pajares, 1996). People's efficacy beliefs play an important role in how well they organise, create, and manage the circumstances that affect their life.

> The strength of families, communities, social institutions, and nations lies partly in people's sense of collective efficacy that they can solve the problems they face and improve their lives through unified effort. People's beliefs in their collective efficacy influence the type of social future they seek to achieve, how much effort they put in to it, and their endurance when collective efforts fail to produce quick results. The stronger they believe in their capabilities to effect social change the more actively they engage in collective efforts to alter national policies and practices. The challenges for people center on common problems that require people working together to change their lives for the better. Those who are beset by a low sense of efficacy are quickly convinced of the futility of effort to reform their institutional systems. Changes can be achieved through the unified effort of people who have the skills, the sense of collective efficacy, and the incentives to shape the direction of their future environment (Bandura, 1995, p 35).

Bandura (1995) suggests that group achievements and social change are rooted in self-efficacy. Earley (1993) attests to the cultural universality of the functional value of efficacy beliefs. In comparative studies, beliefs of personal efficacy contribute to productivity by members of collectivist cultures as they do by those raised in individualistic cultures, suggesting that societies are less homogeneous than is commonly believed. The key point is that there are individualists in collectivist societies and collectivists in individualistic societies. Efficacy beliefs, Earley (1994) claims, function similarly in collectivistic and individualistic societies whether analysed at the societal or the individual level. To illustrate, a collectivist society populated with members who are consumed by self-doubts about their capabilities and anticipate the futility of any effort to shape their future is condemned to a dismal existence.

Self-efficacy has often been referred to as a construct guilty of supporting individualistic agenda. However, Bandura (1995) has argued that it does not equate with individualism but more readily with personal efficacy as it contributes to both group directedness as well as self-directedness. He claimed that in collectively

oriented systems, people work together to produce the benefits they seek, arguing that group pursuits are no less demanding of personal efficacy than are individual pursuits. He added that people who work interdependently in collective societies have no more or less desire to be efficacious in the particular roles they perform than in individually oriented systems. The salient point in his argument about personal efficacy is that it should be valued not because of reverence for individualism but because a strong sense of personal efficacy is vital for successful adaptation and change, regardless of whether it is achieved individually or by group members working together. The reasons for including collective efficacy in this study are two-fold. First, teachers generally work as a collective group within schools, and second, Māori cultural practices are claimed to be more collective than individualistic.

Collective school efficacy

'Teachers operate collectively within an interactive social system, rather than as isolates' (Bandura, 1995). Schools and teachers are considered to operate within collective systems for the benefit of the communities they serve. The success or lack of success of schools is thought to be related to teachers' efficacy beliefs. Schools in which staff collectively judge themselves as powerless to get difficult students to achieve academic success are said to convey a group sense of academic futility. In contrast, schools in which staff members collectively judge themselves capable of promoting academic success imbue their schools' with a positive atmosphere for development. Bandura (1993) contends that socioeconomic and ethnic composition of the student bodies counts and that differences between schools and the level of academic achievement of students are related. However, he believes that altering the staff's beliefs in their collective instructional efficacy can have a positive affect. In general, however, it has been found that the higher the proportion of students from lower socioeconomic levels and of minority status, the lower the staff's collective beliefs in their efficacy to achieve academic progress, and the worse the students fare academically. Student absenteeism, low achievement, and high turnover also take a toll on collective school efficacy.

A school's collective sense of efficacy at the beginning of the academic year is said to predict the school's level of academic achievement at the end of the year when the effects of the characteristics of the student bodies, their prior level of academic achievement, and the staff's experiential level are factored out (Bandura, 1995). Obviously, staff who begin the year believing that they are capable of teaching their children successfully will more likely achieve that goal than staff who do not.

Creating environments conducive to learning rests heavily on the talents and self-efficacy of teachers (Bandura, 1995). Teachers who show weak commitment to teaching are said to spend less time in subject matters in their areas of perceived inefficacy, and devote less time overall to academic matters (Enochs & Riggs, 1990; Evans & Tribble, 1986; Gibson & Dembo, 1984). Teachers with low self-efficacy are also vulnerable to burnout.

Related concepts and influences on self-efficacy

Bandura (1977) hypothesised that efficacy beliefs influence level of effort, persistence, and choice of activities. Therefore students who exhibit high self-efficacy within a learning environment are apt to participate more readily in tasks, work harder, and persist longer in the face of difficulties, in contrast to students who have lower self-efficacy. Self-efficacy has been found to influence students' acquisition of skills by heightening their persistence (Schunk, 1981), and also students' learning through cognitive as well as motivational mechanisms (Zimmerman, 1995). Perceived self-efficacy is also positively correlated with students' choice of majors in college, success in course work, and perseverance in study (Hackett & Betz, 1989; Lent, Brown, & Larkin 1984).

Factors that contribute to an individual's self-efficacy are summarised in Figure 3.

self-esteem		achievement motivation
collective efficacy		self-concept
intrinsic motivation	SELF-EFFICACY	locus of control
learned helplessness		environmental/social supports
learning strategies		skills
personal attributes		perceived usefulness
anxiety		stress management

Figure 3. Factors related to self-efficacy

All of the factors in Figure 3 relate to self-efficacy, and are interdependent. Therefore, self-efficacy is implied to have wide veracity in explaining behaviour within academic situations. The influence that the factors in Figure 3 have on self-efficacy is also determined by the confidence an individual possesses when approaching the task (Pajares & Miller, 1994).

The following related concepts are examined in this study: ability, attribution, motivation, strategy use and self-regulated learning, and social cognition. Each of these is outlined briefly and is discussed in relation to self-efficacy.

Ability

Bandura (1993) claimed that merely possessing knowledge and skills does not mean that one will necessarily use them effectively under difficult conditions. For example, students with the same level of ability may differ considerably in their perceived efficacy to manage academic demands. Efficacy beliefs, he argues contribute to academic performance over and above ability. In a study by Lent, Brown and Larkin (1984), students with a strong belief in their ability displayed greater persistence and achieved significantly higher grades than those with low confidence. Self-efficacy was also found to predict persistence and academic performance (Lent, Brown and Larkin 1986).

Attribution theory

Attribution theory focuses on how people explain the causes of their own successes and failures (Slavin, 1997). Unlike predictions, attributions are made after the event, but are still thought to influence future events and behaviour. Attributions are perceived causes of outcomes. Attribution theories assume that people desire to explain the causes of significant events (Kelley & Michela, 1980; Weiner, 1985). Attribution theory is centrally derived from locus of control (Rotter, 1954). A person with an internal locus of control is one who believes that success or failure is due to his or her own efforts or abilities. Someone with an external locus of control is more likely to believe that other factors, such as luck, task difficulty, or other people's actions, cause success or failure. Several researchers have found that students who are high in internal locus of control have better grades and test scores than students of the same intelligence who are low in internal locus of control (Schunk, 1991; Shell, Colvin, & Bruning, 1995). Studies have found that locus of control was the second most important predictor after ability or a student's academic achievement (e.g., Pajares & Miller, 1994; Randhawa, Beamer, & Lunberg, 1993; Zimmerman & Bandura, 1994; Zimmerman, Bandura, & Martinez-Pons, 1992). The reason is easy to see. Students who believe that success in school is due to luck, the teachers' whims, or other external factors are less likely to work hard than students who believe that success and failure are due primarily to their own efforts. In reality, however, success in a particular class is a product of both students' efforts and abilities (internal factors) and luck, task difficulty, and teacher

behaviours (external factors). Slavin (1997), adds that individual personality traits also have some bearing upon how people attribute responsibility for their own failure or success to internal or external factors. In cognitive dissonance theory, a central assumption of attribution theory is that people will attempt to maintain a positive self-image (Covington, 1984). So, if students are doing well in an activity, they are likely to attribute their success to their own efforts or abilities; however, if they are doing poorly, they are likely to attribute failure to factors over which they have no control (Vispoel & Austin, 1995). Forsyth (1986) illustrated this point by giving a group of people certain tasks to complete. At the end of the task he told some that they passed and others that they had not (even though all, in fact, were equally successful). Those who were told that they had failed tended to attribute their failure mainly to bad luck, whereas those who were told that they had succeeded attributed their success mainly to skill and intelligence.

Attribution theory is claimed to have some relationship with self-efficacy in the sense that some of the factors used in the self-appraisal of efficacy are singled out in attribution theory. In self-appraisal of efficacy, succeeding without having to exert much effort enhances one's self-efficacy. According to attribution theorists (Nicholls, 1978; Weiner, 1985), students' judgements of the cause of their academic successes and failures determine their expectations for future performance. Attributions of failure to insufficient effort heightens performance motivation, whereas attributions to inability decreases it. Researchers claim that there is a bi-directional relation between causal attributions and beliefs of personal efficacy. Perceived self-efficacy influences causal attributions. Students of high efficacy attribute failure to insufficient effort, whereas students of low efficacy attribute it to low ability (Collins, 1982; Silver, Mitchell, & Gist, 1989). Schunk (e.g., Schunk, 1981; Schunk & Cox, 1986) have shown that attributional feedback influences perceptions of efficacy in students.

In summary, ability cues are related to success attained easily or early in the course of learning. Success ascribed to stable causes such as high ability and low task difficulty result in higher expectancies of success, whereas success attributed to unstable causes such as effort and luck are less likely to lead to higher expectancies.

Motivation

In self-efficacy theory, efficacy beliefs affect human functioning through four intervening processes: motivational, cognitive, affective, and choice processes (Bandura, 1986). The motivational effects are said to be rooted in goal setting and

outcome expectations. Bandura (1991a) makes the important point that if an educational outcome is thought to be unattainable or worthless, students will not be motivated. He argues that outcome expectations and values by themselves are insufficient to motivate high performance, but that people's efficacy beliefs are better predictors of performance.

In academic activities, the quality of performance largely determines the outcomes one experiences. Feelings of control increase one's choice of academic tasks, effort, persistence, and achievement (Bandura, 1986), whereas feelings of little control over outcomes negatively affects expectations, motivation and emotions (Licht & Kistner, 1986). There is evidence that perceptions of competence and self-efficacy are predictive of academic motivation and achievement in naturalistic contexts.

Bong (1996) warns researchers that one model of motivation is possibly not able to capture the full dynamics of motivated behaviours, due, in part, to the different orientations of investigators, who tend to emphasise a particular dimension of motivational phenomena over others. She suggests that there are countless factors that need to be considered, and the potential disparity among researchers, practitioners, and students on how these social and contextual factors (and each of their dimensions) is evident. This present study aims to capture some of these factors as they relate to the sample group within the two contexts of academic and cultural.

Self-efficacy, strategy use and self-regulated learning

Researchers have found that self-efficacy is related to self-regulated learning variables (Feather, 1988; Fincham & Cain, 1986; Paris & Oka, 1986; Pintrich & Schrauben, 1992; Pokay & Blumenfeld; 1990; Schunk, 1982b, 1985). Students who believe they are capable of performing academic tasks were found to use more cognitive and metacognitve strategies, and persist longer than those who did not (Pintrich & Garcia, 1991). Pintrich and De Groot (1990) reported a correlation between global academic self-efficacy and both cognitive strategy use and self-regulation through use of metacognitve strategies. In addition, academic self-efficacy correlated with academic performances such as exams, essays and reports.

Self-regulated learning commonly is viewed as the fusion of 'skill and will' (Paris & Winograd, 1990). Skill is generally defined as the deployment of different learning strategies, including cognitive strategies such as rehearsal and elaboration; metacognitive strategies such as planning and monitoring; and more recently,

volitional control strategies such as controlling one's efforts and environment in order to protect one's intention to learn (Corno, 1993; Kuhl, 1987; Weinstein & Mayer, 1986). Will refers to students' motivation, and specifically their goals for learning or reasons for engaging in a task. Researchers have given much attention to two goals: intrinsic, or mastery goals, and extrinsic, or performance goals (Ames & Archer, 1988; Dweck & Leggett, 1988; Graham & Golan, 1991).

Self-regulated learning is said to be a cognitively inherent aspect of learning, and is principally comprised of knowledge, beliefs, and learned skills. It is also said to be mallable in response to environmental influences, and forms incrementally as a learner engages with instructional experiences. When inherently self-regulating learners engage in solitary study, the inherent qualities of cognition are most influential. However, solitary study is said to lack the dynamically responsive scaffolding and guidance available when learning occurs in the context of social interaction (Gaskins, Anderson, Pressley, Cunicelli, & Satlow, 1993). In a sense, solitary study is an anomaly in teacher education as teachers are being prepared to work in co-operative and collective systems.

Bouffard-Bouchard, Parent, and Larivee (1991) found that students with high self-efficacy engaged in more effective self-regulatory strategies at each level of ability. Although low self-efficacy is detrimental, effective self-regulation does not require that self-efficacy be extremely high. Salomon (1984) found that lower self-efficacy led to greater mental effort and better learning than when self-efficacy was higher. Assuming that learners feel efficacious enough to surmount difficulties, harbouring some doubt about successes may mobilise effort and more effective use of strategies than if one is feeling overly confident.

Generally, studies including both children and adults have supported the claim that learners who show greater persistence tend also to have strong learning goals. Pintrich and DeGroot (1990) reported that intrinsic value in learning among seventh grade science students was related to strategy use, self-regulation, and persistence independent of initial performance. Pintrich and Garcia replicated these findings with university students and found similar outcomes. Similarly, Miller, Behrens, Greene, and Newman (1993) found that college students with strong learning goals were more likely to persist in a difficult statistics class than students with strong performance goals.

This suggests that differences in achievement and strategy use are due to a person's learning orientation. This study attempts to gauge the student teachers strategy use and metacognitive knowledge. Students who report high strategy use are claimed to use strategies such as integration, organisation, and memorisation compared with students who performed poorly. Furthermore, students with a strong learning orientation are said to achieve higher in a difficult introductory course because they engage in a greater number of adaptive behaviours, not because they differ in cognitive ability. Adaptive behaviours include focussing one's efforts on improving one's knowledge, using a greater range of strategies, using them more frequently, and having greater access to metacognitive knowledge. It appears that a strong learning orientation may predispose one to value and acquire strategic and metacognitive knowledge (Salomon, 1984). Identifying the learning orientations of student teachers and their use of strategies was an important factor in this present study.

Pintrich and DeGroot, (1990) found that perceived self-efficacy was predictive of students' use of cognitive and self-regulative learning strategies in classroom situations, and that these strategies were predictive of academic attainment. A point of interest then is whether one can have high self-efficacy without self-regulatory learning strategies. The present study asks the participating group to list some of the strategies that they use in preparation for course assignment work.

Social cognitive theory

Social cognitive theory (Bandura, 1993) provides a multifaceted approach to children's motivation and self-regulatory development. Children's efficacy beliefs play a prominent role in regulating cognitive, affective, and motivational factors that operate in concert in the development of children's capabilities to manage their own learning and intellectual attainments. Vygotskian sociocultural views of children's self-regulatory development emphasise reciprocal teaching and internalization, inferring that learners will be motivated if learning activities are embedded in a social system involving joint participation in learning with peers and - or others (Henderson & Cunningham, 1994).

A key finding in social cognitive development of educational self-regulation that has implications for educational policy as well as for individual development suggests there is a need for greater flexibility in the curriculum where students learn to self-manage more effectively. This will not only increase students' perceptions of self-efficacy but also their motivation and academic success (Zimmerman, Greenberg, &

Weinstein, 1994). Greater self-regulation, different types of motivation, and use of behavioural, environmental, and social supports (Zimmerman, 1994) are required. Providing both training and opportunities to self-regulate, means that students are more likely to assume responsibility for their academic achievement.

Bandura (1995) suggested that a kind of staying power is necessary to achieve success, as he stipulated that self-regulatory skills will not contribute much if students cannot get themselves to apply them in the face of difficulties. The higher the students' beliefs in their efficacy to regulate their motivation and learning activities, the more assured they are in their efficacy to master academic subjects. This promotes intellectual achievement both directly and indirectly by raising academic aspirations (Zimmerman & Bandura, in press; Zimmerman, Bandura, & Martinez Pons, 1992). In judging personal efficacy to manage given task demands, individuals have to consider not only their cognitive and behavioural skills but also their skills in managing their motivation and their stress and discouragement in the face of threats and difficulties. Social cognitive theory describes these origins, the mechanisms, and the differential effects of efficacy beliefs as well as providing guides on how to create and enhance them. In this regard, social cognitive theory provides a solid basis for the present research inquiry.

Cultural self-efficacy

Bandura (1995) described self-efficacy and its possible manifestation in society in the following statement, 'beliefs in their capabilities to mobilise the motivation, cognitive resources, and courses of action needed to exercise control over cultural demands'. For the purposes of this present study this description serves as a definition for explaining cultural self-efficacy.

Academic self-efficacy and related concepts have been explored in some depth. This next section explores, first, the notion of cultural self-efficacy, its context, its relevance and its utility in explaining the behaviour of Māori student teachers in pursuit of learning aspects of their own culture, and second, the teacher education framework developed for this study. This framework serves the purpose of identifying key concepts in Māori teacher education and allows an analysis of these student teachers' notions of the concepts, and their levels of cultural self-efficacy.

Erickson (1997) proposed the notion that 'everything in education relates to culture - to its acquisition, its transmission, and its invention' (p. 33). He suggests that we

are captured by it, as it impacts upon all facets of our life. We are born into our culture, and learn our culture from our everyday experiences. Thus, it becomes our tool for the conduct of human activity (Erickson, 1997). Erickson believes that culture is political, social, individual, and institutional. Some aspects of culture are implicit and some explicit (such as our moods and desires as well as our thoughts, all of which are culturally constructed) (Erickson, 1997).

He makes three important points about culture. First, culture is systematically varied in relation to the allocation of power in society. Second, social conflict is a fundamental process by which cultural variation is organised. Third, culture is either inherited through tradition or, invented to accommodate for today's needs (Erickson, 1997). He adds that it is not the specifics of cultural traits as practised by the members that are important, but rather the economic and political viability of the ethnic group within the larger society that counts. It is therefore somewhat easier to perceive that a minority culture may have much work to do in order to remain viable. To an extent, Erickson accounts for the New Zealand situation, given that the political and economic level of Māori have increased considerably in recent years. The increased level of Māori political and ecoenomic activity has been accompanied by cultural and social develoment.

Cultural minorities in education

Currently, there remains a serious gap between the education performance of Māori and non-Māori, (Chapple, Jefferies & Walker, 1997). Delpit (1995) noted that for students of colour in the United States, schools are the students' 'second culture' which often appears alien and dominating. Regarding Māori students in New Zealand, similar criticism has been levelled at schools . Delpit's main argument, it seems, is directed at the culturally mainstream ways in which schools operate. This includes the use of speaking and writing which largely represents a 'language and culture of power' which it is argued minority students need to master for success. Simon (1984) found that teachers unwittingly teach in 'moralising ways'. Well-meaning middle class teachers teach implicitly their own cultural traits and in doing so do not take cognisance of Māori cultural practices. This may disadvantage Māori students and become a major factor in poor educational acievement.

Ladson-Billings (1994) suggested several strategies for teachers to alleviate the feeling of domination of minority group children. Teachers should use a variety of teaching styles when teaching, deal directly and explicitly with issues of injustice

and oppression and the privileging of mainstream knowledge and perspectives as they occur (Apple, 1993; Giroux, 1991; Ladson-Billings, 1994; McCarthy, 1993; Nieto, 1995; Perry & Fraser, 1993; Sleeter & Grant, 1993; Trueba, 1994). Such approaches have been called critical pedagogy, counter-hegemonic pedagogy and emancipatory pedagogy. She proposed a theory of 'culturally relevant teaching' (King & Wilson, 1987; Ladson-Billings, 1989a, 1989b) which serves to empower students. More importantly, it uses the students' culture to help them create meaning and an understanding of the world. Others (Osborne & Coombs, 1987; Osborne & Sellars, 1987) suggest similar strategies, stating that success is more likely if the curriculum is relevant to the students' lives. Furthermore, culturally relevant teaching is important in improving black student academic success, sociocultural success, and parent and student satisfaction (Ladson-Billings, 1989a). In her study, parents expressed a strong desire for their students' schooling experiences to equip them academically without alienating them from their homes, families and culture (Ladson-Billings, 1993). The point she makes here is a crucially important one with relevance in New Zealand as similar findings have been verified in studies of Māori educational desires (AGB McNair, 1992; MRL Research Group, 1995; Te Hoe Nuku Roa, 1997).

Perry (1970) examined the epistemological beliefs of college undergraduates through a series of interviews and questionnaires. He concluded that learning was difficult for some students because their conceptions of knowledge were different from those of their teachers. When students first enter university courses, they believe knowledge is simple, certain, and handed down by authority. Through exposure to different ways of thinking and doing things, most students come to believe that knowledge is complex, obtained through a process of reasoning, and may involve ambiguities and conflicting truths. Within an academic setting, several studies have found that students themselves favour group work over individual work, suggesting that working as a collective is a preferred choice of learning. Such evidence suggests collective self-efficacy may play an important role in learning (Osborne & Bamford, 1987; Osborne & Francis, 1987; Philips, 1972).

A final thought about cultural awareness and teaching strategies. Erickson (1997) proposed that educators develop approaches which project 'consciousness awareness'. This basically involves a comparative awareness whereby the construction of in-group identity becomes a relational process through which a definition of Other as well as of Self, of Them and of Us, - is understood. This very point was uncovered by Alton-Lee, Densem and Nuthall (1991) in their

research about gender and race where they found that Māori students were not only subjects of racial abuse but were almost entirely excluded from social studies classroom discussions when the teacher used the terms 'them' and 'us' when talking about particular examples to illustrate content. Their message was simple but served as a powerful example of inclusion and exclusion in the classroom and its effects on children.

Sources of cultural self efficacy

Otteingen (1995) proposed that forming beliefs of personal efficacy involves a complex process of self-appraisal. This self-appraisal entails selecting, weighing, and integrating information from multiple sources. It is in this appraisal process that culture, she believes, plays an influential role. Culture not only affects the type of information provided by the various sources, but also 'which information is selected and how it is weighed and integrated in people's self-efficacy judgements' (p. 151). She goes on to say that culture is conducted in a range of contexts such as family, school, workplace and community, all of which provide information about one's self-efficacy. Therefore, understanding how cultures affect everyday conduct in these major societal systems can help clarify how people's self-efficacy appraisal varies across cultures. She refers to Hofstede's studies on culture (Hofstede, 1980, 1991) where he hypothesised that value systems constitute one major source of cultural difference. His study consisted of an analysis of the cultural value systems in more than 40 countries, from which he was able to identify four dimensions of cultural differences: Collectivism/Individualism, Power distance, Uncertainty avoidance, and Masculinity/Feminity cultures.

Collectivist cultures (Hofstede, 1989, 1991; Triandis, 1989; Triandis *et al.*, 1990) are cultures that promote people as belonging to 'in-groups'. These groups demand loyalty from members and in return, people receive protection from the in-group. In contrast, individualist cultures promote the view that people look primarily after their own welfare and their immediate family's interests. They value autonomous definition of the self and individual goals more than group goals (Triandis, McCusker, & Hui, 1990).

Power-distance (Hofstede, 1986, 1991) cultures are cultures with large disparity in power, whereby people are expected to accept inequality in power. This is especially true for the less powerful members of the culture. People in cultures with small power distance value a much more equal distribution of power.

Uncertainty avoidance (Hofstede, 1986, 1991) refers to people in cultures who tend to avoid uncertainty and who are easily distressed by new, unstructured, unclear, or unpredictable situations. They try to avoid such situations by maintaining strict codes of conduct and a belief in absolute truths. Members of such cultures tend to be compulsive, security seeking, intolerant, aggressive, and emotional. In contrast, people in cultures of weak uncertainty avoidance tend to be relaxed, tolerant, risk accepting, contemplative, and unaggressive.

A masculine culture strives for a maximal distinction between men and women. Men are expected to strive for material success, to be assertive, ambitious, and competitive, whereas women are expected to be successful in serving the communal side of life, such as caring for children and the weak. In masculine cultures women are not expected to take on professional jobs. In contrast, feminine cultures value men who care for the non-material aspects of life and women who obtain professional and technical jobs. In higher education, men and women tend to pursue studies in the same subjects, whereas in masculine societies different subjects are considered appropriate for men and women.

Hofstede was then able to postulate that cultural differences exist between self-efficacy appraisals. The first difference was in the sources of efficacy which he said may vary in three ways. First, some sources may be more prevalent in some societies than others. For example, in societies that are rigidly segregated by gender, women may have less exposure to male models and vice versa. Second, even when sources are equally prevalent they may take different forms. For example, in collectivist systems, children get feedback on how their in-group performed as well as on their individual performance, whereas in individualist systems children get feedback only on their personal performance. Third, sources might differ in how they are valued. For example, emphasising individual attainments will obviously be prized more in individualist systems than in collectivist systems.

Hofstede (1989,1991; Triandis, 1989; Triandis *et al.*, 1990) also claimed that families in collectivist cultures teach children to love and respect the needs of their in-group. In school these same children tend to pursue performance goals demonstrating required competencies more than learning goals of expanding one's competencies (Ames, 1992; Dweck & Legget, 1988). Thus, they create a social reality that makes their performance outcomes noticeable to their collective. In

collectivist cultures, the evaluation by in-group members becomes an important source of efficacy information, with modelling by other in-group members being influential. Children tend to be more socialised in collectivist cultures and are therefore more responsive to the preference of their in-group (Markus & Kitayama, 1991). Furthermore, they claim that the emotional states of children raised in individualist systems are a more prominent source of self-efficacy appraisal. In cultures high on individualism, children are expected to learn how to learn. Performance outcomes are seen as instrumental to achieving self-actualisation and the realisation of one's individual potential. They focus their self-appraisals of efficacy on information concerning their personal performance attainments (e.g. improvements or declines) (Rosenholtz & Rosenholtz, 1981). Children from individualist cultures may also be more in tune with their private emotional state which serves as a more prominent source for the self-efficacy appraisal than is the case for a child from a collectivist system.

The whakatauki or proverb from Te Aupōuri: *Kia ū ki tōu kāwai tupuna, kia mātauria ai, i ahu mai koe i hea, e anga ana koe ki hea.* (Trace out your ancestral stem so that it may be known where you come from and in which direction you are going), gives an idea of the philosophy that underpins Māori as a collectivist culture. It states that first one has a past, and it is that past which informs your future. In a sense, it suggests that one belongs to a long line of ancestors and therefore a sense of commitment remains. In keeping with the essence of this proverb is the idea that one is a member of a group and therefore a part of a bigger picture.

Although researchers have established that self-efficacy is a strong predictor of behaviour, (Maddux, Norton, & Stoltenberg, 1986) research on the relationship between self-efficacy and academic performance of ethnic minority students is still limited. In a study of cultural perspectives on school motivation, McInerney, Roche, McInerney and Marsh (1997) found that the motivational profiles of the diverse groups they surveyed are more similar than different. They found that some children from indigenous minority groups are effectively socialised into what it means to be a student in western schools. They were then led to ask why some children appeared to cross the cultural boundaries successfully and do well at school, while others failed. They wondered what factors and achievement goals were related to a child's perception of his or her role as a student within the school setting, rather than being related to specific cultural values which may be relatively unimportant in a school setting. Their final question was, can, (and if so how do),

some children operate effectively at school while also maintaining strong cultural ties and values? In a sense, this is what this present study aims to inform. Why is it that some Māori student teachers are able to cross the cultural boundaries successfully and do well, while others are less successful? It is believed that identifying and measuring students' self-efficacy may provide some clues to answering this question.

Developing a Māori teacher education framework

This next section looks specifically at teacher education, and proposes a framework by which cultural efficacy may be measured. Several other frameworks have been examined in the process of developing an appropriate framework (Durie, 1993; Durie, 1994; Durie *et al*, 1995; Pere, 1984,1991; Te Whāriki, 1996; Thomas, 1988a; Winiata, 1988). The use of frameworks as a research tool is now widely recognised amongst Māori researchers as part of their methodology. Most of them aim to capture characteristics distinctly Māori, such as Māori identity, culture, well-being, and knowledge. Frameworks not only enable researchers to present their findings in a culturally appropriate way but also recognise the uniquely integrative nature of the Māori world view. The development of such frameworks recognises that in researching Māori an integrative intent is necessary if a Māori essence is to be retained. Such a Māori essence includes the integration of the physical, spiritual, cultural and environmental dimensions.

He Huarahi Ako Framework

The framework developed in the present study is named He Huarahi Ako, or Pathways to Learning. It has been developed as a basis for conceptualising Māori student teacher cultural self-efficacy within an academic institution. The framework proposes key Māori knowledge concepts and provides a focus for the study within the cultural section. This framework also serves to clarify the assumption held by the general education community, that ethnicity and culture are the same. Thomas (1988) dispelled this view by observing that not all Māori have had the same access to Māori cultural capital. An examination of the diverse backgrounds and realities from which Māori student teachers come will not only enhance teacher educators' knowledge but more importantly inform their programmes.

The framework is intended to assist the gathering and analysis of information from participants at a personal level. It also recognises that individual responses may support a collective view. The framework aims to measure the level, generality, and

strength of an individual's self-efficacy, as proposed by Bandura (1977, 1986), across the range of key concepts within the framework.

The theoretical position that this study takes is that for Māori student teachers to develop a high sense of cultural self-efficacy they must be allowed absolute and undisturbed access to their culture. Second, some important curriculum and pedagogical issues need to be explored in order to understand better the needs of Māori student teachers. Research by Ladson-Billing in 1993 found that a curriculum that stresses cultural affirmation and draws from students' cultural strengths is much more effective in committing both students and teachers to learning. Cummins (1989) also claimed earlier that successful academic development programmes promote in students a strong sense of confidence in who they are and in their ability to learn. Third, for students to develop cultural self-efficacy, there must be a range of opportunities for access to cultural knowledge.

The framework is conceptualised as a wharenui (meeting house). Figure 5 provides a representation of the framework. As depicted, the house is reliant on each of its parts to complete and secure a firm base. Weaknesses in any of the points means that the house becomes at risk of toppling. In a sense, this same theory applies to individuals. In other Māori framework studies, Durie (1985a) developed Te Whare Tapa Whā, where he compared health to the four walls of a house, which illustrated the highly integrative nature of Māori health. Similarly, Pere (1984) produced a model where she used the octopus to illustrate the major features of health from a Māori family perspective. In this study the structure of a house is used to illustrate the interconnectedness of learning. In Te Ao Māori, a meeting house symbolically represents the body of a tribal ancestor. It consists of four main posts, rafters, a main ridge pole and floor (Walker, 1975). Each of these dimensions are represented in this study.

In this present study, the four posts represent key Māori concepts in teacher education:

Pou Tuatahi (Post 1): # Te Reo (language)
Pou Tuarua (Post 2): # Tikanga (customs and practices)
Pou Tuatoru (Post 3): # Kaupapa Māori (Māori education politics)
Pou Tuawha (Post 4): # Ako (learning and teaching)

The posts hold up the meeting house and are interconnected both physically and symbolically. The six key concepts of the framework (Te Reo, Tikanga, Kaupapa Māori, Ako, Whānau, Wairua) are indicators of these student teachers' cultural self-efficacy. Table 1 outlines these concepts, the themes, and their sources as they relate to measuring cultural self-efficacy.

The other essential component of the house is the main ridge pole, or tāhuhu, which represents Wairua or the 'Māori inner soul of life' (Nepe, 1991). In a sense, Wairua mediates a person's well-being. Bandura might call this post a person's self-efficacy, in that self-efficacy mediates between what a person knows and can do, and what they actually do. How wairua impacts or serves the student teachers' well-being is a focus of this present study.

The final addition to this framework is the papa or floor, which represents the whānau, or family (immediate and or extended). Examining aspects of whānau and their influence on an individual's cultural development is an important consideration of this study.

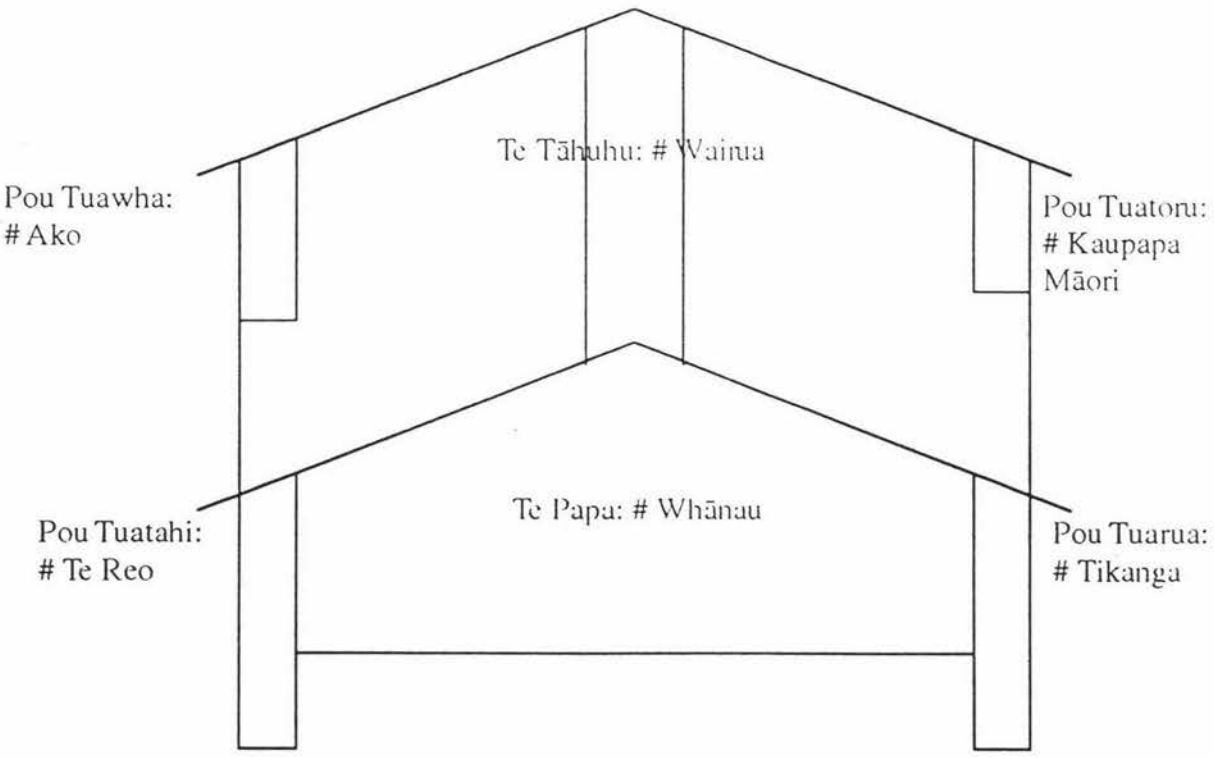

Figure 4. A wharenui (meeting house) depicting key concepts in Māori teacher education

Table 1. *He Huarahi Ako: Pathways to Learning*

	Te Reo	Tikanga	Kaupapa Māori	Ako	Whānau	Wairua
FOCUS	Language	Customs/Practises	Māori education	Learning and teaching	Family	Spirituality
KEY ASPECTS	The capacity to communicate, think and feel Māori thus providing one with an intact sense of identity	Acting in culturally appropriate ways	Driven by cultural imperatives	The development of intellectual functioning	The development of a sense of belonging	The development of well-being
RELATED CONCEPTS	Mauri (life force) Mana Ihi	Marae Whenua	Tino rangatiratanga Mana Māori	Hinengaro - cognition Whatumanawa - emotions beliefs (insights, intuitions metacognitive awareness)	Relationships (whanaungatanga) Manaakitanga Aroha Āwhina Mana tangata Mana whānau	Io Integration Tūpuna Wisdom Reverence Respect
THEMES	Te reo Māori is the life line and sustenance of a culture Empowerment	The expression of cultural values, attitudes, practices and beliefs	A learning option that reproduces and strengthens cultural values, practises and beliefs	Learning implies individuality as well as collectivity The expression of Māori pedagogy	A system of collectivity of commitment and responsibility	Wairua is implicit in all aspects of life both the seen and unseen
SOURCES	Whānau School	Whānau Hapū Iwi Marae	Marae Kohanga Kura kaupapa Māori Wānanga	Whānau School	Whānau	Whānau Whenua Church Karakia

This framework proposes a means by which to develop appropriate teacher education programmes based on a Māori centric approach. Capturing the Māori approach to education has therefore been a motivating factor in the development of this framework. Furthermore, exploring the diverse backgrounds and realities that these student teachers' come from can lead to a better understanding of their needs.

Pou Tuatahi: #Te Reo Māori (Language)

Ki te kore koe e mōhio ki te kōrero Māori ehara koe i te Māori

If you do not speak Māori you are not Māori

(Apirana Ngata)

This remark made by Apirana Ngata over seventy years ago has the capacity to outcast some Māori. Increasingly, more Māori have found themselves in this situation of not being conversant in their own tongue. Challenging a persons identity based on their ability to speak Māori may seem somewhat harsh but Timoti Karetu, the present Māori Language Commissioner, in 1990, expressed a similar view to Ngata:

> for me language is essential to my mana. Without it could I still claim to be Māori? I do not think so for it is the language which has given me what mana I have and it is the only thing which differentiates me from anyone else

Wiremu Kerekere in his songs also confirms that Te Reo Māori and customs are important to one's well-being and status as a Māori. The following words in his song echo his sentiments: *'Kia mau ki ō tikanga, Me tō reo Māori, Koinei rā tō tūranga teitei e'* (Retain your customs and your Māori language, for this is what gives you status). The views expressed by Ngata, Karetu and Kerekere provide one perspective of the importance of Te Reo, while Muru (1990) and Pere (1991) give yet another view. Muru proposed the view that Te Reo provides a person with spiritual sustenance as well as a validation of their existence. Pere's view of Te Reo Māori is that it is the 'ethos or life principle of a people. She goes on to say that it 'helps give sustenance to the heart, mind, spirit and psyche' (p.9) and has the ability to link people with their world. All commentators strongly advocate the importance of Te Reo Māori to a persons identity.

Similar to the others Ochs (1986) claimed that language is the essence of ones culture which is most often captured as a child, purely because as a child they are

exposed to the language habits and social skills within the context of the culture. Tangaere-Royal (1996, 1997) in her studies of children's learning in Kohanga Reo (Māori language pre-schools) found similarly stating that the acquisition of language gives rise to the acquisition of socialisation skills including cultural values and practices. Cummins who has written widely on the subject of minority languages and students claims that having knowledge of ones own language has the capacity to empower minority students. Empowerment he claimed can be achieved by promoting their linguistic talents as well as by strengthening their identity and self-esteem.

How than are Māori faring linguistically after nearly one hundred and seventy years of British colonisation. In 1910, 92% of the Māori population could speak Māori, by 1990 the number of speakers of Māori had fallen to about 15% (Benton, 1990). In the latest Māori language survey commissioned by Te Taura Whiri i te Reo Māori, it was found that only approximately 13.7% could speak Māori at a sustained conversational level.

Reasons proffered for this huge decrease in Māori language capability has been provided by Waite (1992) who wrote that Te Reo Māori has had to compete with English. English is a major international language that enjoys high prestige, as well as being supported by strong institutional infrastructures. Both of these situations therefore have helped in the demise of Te Reo Māori. Furthermore he suggests that unless drastic measures are instituted across society and within institutions, such as universities, the survival of Te Reo Māori remains tenuous.

Durie (1985b) in his framework for good health claimed that Te Reo Māori is an important factor for good health. The other two factors he proposed were Whenua (land), and Whānau (family). He argued that good health required a firm anchoring of the three, and that blocked access or denial could result in poor health. This present study takes a similar view in that blocked access or denial of the key concepts of the framework could result in poorly prepared teachers.

The factors suggested by the above writers are important, especially if we consider the aspirations of Māori people. Several studies show that a large proportion of the Māori population (about three quarters or more) are keen that their children be involved in some form of Māori educational instruction (AGB McNair, 1992; MRL Research Group, 1995). Furthermore, Kegan (1996) claimed being able to speak Māori had social, cultural and cognitive benefits. In addition, Thomas (1978)

demonstrated that Māori children who had some knowledge of Māori language and culture gained higher scores on school achievement tests than Māori children who had little or no knowledge of their culture. Māori educational desire to learn the language coupled with social, cultural and cognitive benefits therefore are sound reasons to develop effective learning and teaching programmes to meet the needs of its Māori community.

In summary, the essential theme proposed by this framework post is that Te reo Māori is the life line and adds sustenance to its culture, furthermore its allows one the capacity to communicate, think and feel Māori, as well as providing one with an intact sense of identity.

Pou Tuarua: #Tikanga Māori (customs)

Language and culture are said to be inextricably intertwined, so much so that it is not uncommon for writers to discuss the two as if they were one. Customs or cultural practices inform every event in Māori life, whether formally or informally. Such customs can most easily be seen on marae and within Māori ceremony, where each event or occasion procedes in a particular way for specific reasons. The term Tikanga refers to any number of practices or protocols that are exercised by Māori, in both life and death events. Some of these protocols are explained by Cleve Barlow in his book *Tikanga Whakaaro* ,where he lists and explains 70 key concepts in Māori culture. This list, he acknowledges, does not include all customs. Tikanga or protocol, it should be noted, is not static but has been developed taking in to account the changing nature of Māori society (Metge, 1995). Barlow (1991) notes that such customs provide one with an insight in to the psychology, cultural, and spiritual aspects of Māori society. Tikanga Māori collectively fulfils the function of maintaining law and order, covering the range of human behaviours (including moral and spiritual aspects) (Metge, 1995).

Like Te Reo Māori, the depth and level at which customs and protocols are carried out has decreased. In former times, such protocols were ruled by the laws of Tapu and Noa. Tapu includes aspects of a sacred nature and noa refers to non-sacred matters. Learning was considered to be a tapu matter and as such was to be taken rather seriously (Pewhairangi, 1975; Te Uira Manihera, 1975). Like Te Reo, individual Māori vary in the extent to which they are familiar with, and practise Māori tikanga in their own lives (Hirini, 1997, p.43). Therefore, it is likely to be expressed with varying levels of depth and knowledge.

In summary, Tikanga Māori allows for the expression of 'the right Māori ways' as guidelines for living, thereby allowing Māori the capacity to act in culturally relevant and appropriate ways. Tikanga has been included as an important part of this framework because tikanga reflects and guides Māori culture, and these student teachers will be instrumental in teaching them in an educational context .

Pou Tuatoru: #Kaupapa Māori (Māori politics)

Smith (1995) developed 'Kaupapa Māori' theory to explain Māori educational under- achievement and the loss of language knowledge and culture. Kaupapa Māori is viewed as a 'theory of change that responds to Māori crisis by developing a more culturally appropriate approach'. L Smith (1993) referred to Kaupapa Māori as 'the Māori way of doing things; Māori control, Māori autonomy'. Kaupapa Māori encompasses both proactive and resistance initiatives. Pro-active initiatives include Māori language and cultural initiatives, and resistance initiatives respond to overwhelming domination in social, cultural, economic and political situations in New Zealand by non-Māori. Kaupapa Māori has been articulated and used by a variety of Māori groups to express Māori autonomy or Tino Rangatiratanga, Māori language and cultural aspirations, Māori identity and Māori pedagogy.

Kaupapa Māori has been essentially a direct response to perceptions of Pākehā dominance. Before colonisation, kaupapa Māori was not necessary as Māori did not have to demarcate territory for their own development, rather it was implicit in their lives. Kaupapa Māori basically has been an education initiative as a counter to failing mainstream practices. This is implied in the term kura kaupapa Māori, the name given to Māori schools whose instruction and curriculum is in Māori.

The kaupapa Māori post on the proposed framework has political implications. Given the weight of dominant Pākehā cultural practices, it is recognised that both proactive and resistance initiatives within institutions are necessary to bring about change for Māori in education. Unfortunately, institutions have been very slow to support Kaupapa Māori schools and classes and as such they have developed at faster rates than Kaupapa Māori teacher education. While Kura Kaupapa teacher education courses have recently been established and begin to satisfy the needs of this growing Māori educational initiative, general education classrooms will need to continue the development of their Māori programmes.

The kaupapa Māori pou represents a post on the framework whereby Māori structures, philosophies, and ideals are promoted. It incorporates the concepts of

Tino Rangatiratanga (absolute control and authority) decision making, management, leadership, and Māori knowledge. Decision-making that is Māori-driven, based primarily on Māori structures and ideals. Management that reflects Māori knowledge. Leadership that is empowering and emancipating, therefore acknowledging mana tangata, as well as a structure that reflects responsibility and sound practice.

In summary, this post on the framework incorporates a learning option that reproduces Māori cultural values, practices, resources and beliefs. This in turn, allows Māori the capacity to be driven by their own cultural imperatives.

Pou Tuawhā: #Ako (Māori pedagogy)

Pere (1982) has most recently re-introduced the term Ako which she claims makes no clear distinction between learners and teachers, but is characterised with terms teach, learn, instruct, advise, (Grey, 1971; Williams, 1985). Pere claims, in her model Te Wheke, that learning is holistic, integrated and occurs in levels. The levels referred to are depicted in the poutama pattern in many meeting houses and imply that learning is a developmental process leading upwards.

Metge (1983) has also contributed significantly to our understanding of Māori educational principles and practices. She proposed four principles of learning which she believed to be inherently Māori characteristics of learning: learning through exposure; learning in groups; memory and rote learning; and storytelling. All these she explained, represent Māori particular ways of learning, and describe the term Ako. Many of these have been sidelined in favour of more modern practices in contemporary education institutions. In this present study, the Ako post includes these four principles. Understanding these principles goes hand and hand with an understanding of the culture, and the holistic nature in which all things are viewed. For example, the view that education involves the heart as well as the head, emotion as well as intellect (Metge, 1983), is well accepted amongst Māori education commentators.

Royal-Tangaere (1996) discusses the concept of tuakana/teina as an explanation of learning and development. She describes this as being derived from the two important principles of whanaungatanga and ako. Ako is seen as a practice of learners shifting their role to become teachers themselves. Essentially, tuakana means older sibling and teina younger sibling, and within te ao Māori caring, teaching and being responsible for one's younger sibling is generally encouraged.

This role, however ,is not always determined by age but can be determined by other factors such as skills, with the more skillful teaching the less skillful.

In Te Whāriki (Ministry of Education, 1993), the values expressed allude to what guides teachings in te ao Māori: Mana atua (personal well-being); Mana tangata (development of self-esteem through contributing); Mana whenua (development of sovereignty and a sense of belonging); Mana reo (development of communication); Mana te ao tūroa (development of all aspects of this world and the universe), (cited in Royal Tangaere, 1997).

In summary, the Ako post on the framework implies learning has individual as well as collective validity and importance. This in turn, has the capacity to develop a person's intellectual functioning.

Te Tāhuhu: #Wairua

Wairua has been explained by several writers (Durie, 1994; Metge, 1995; Nepe, 1991; Pere, 1991). Nepe (1991) explains that wairua is an 'integral part of the equilibrium and well-being of Māori people'. The source of wairua, she says, is a direct link to Io Matua Kore (The supreme being), Ranginui (Skyfather), Papatuanuku (Earthmother), and ancestors. In relation to education, she claims that wairua is distinctive and unique and therefore requires a distinctive and unique educational approach. She argues the need for a totally Māori approach to learning as advanced by Kura Kaupapa Māori, a total immersion Māori schooling option.

Wairua is reasonably well understood by most Māori, although not normally articulated, and has received little research attention. Two possible reasons for this may be that Wairua is difficult to measure (Durie, 1994), and that it is inappropriate to study. Durie (1994) describes wairua as

> [implying] a capacity to have faith and to be able to understand the links between the human situation and the environment... A spiritual dimension encompasses religious beliefs and practices but is not synonymous with regular churchgoing.... Belief in God is one reflection of wairua, but it is also evident in relationships with the environment. Land, lakes, mountains, reefs have spiritual significance...(Durie, 1994, p.71).

Both Durie (1994) and Pere (1984) say that good health is related in an important way to Wairua. Similarly, the present writer believes it has validity in education

dialogue, too. Pere (1991) claims that wairua is inextricably intertwined not only with the individual but also with the group of which that person is a member. She also stresses the relationship between the physical environment and the person. This reinforces the Māori world view that a person is not an island but rather a part of an intricate web of interactions with the physical, social, cultural and spiritual elements. Metge (1995) adds that the spiritual dimension is complemented and completed by the physical dimension. This implies the integrated nature in which Māori view the physical realm and the spiritual realm. Both these dimensions are expressed daily by Māori.

Wairua, in this present study, acknowledges the person's spiritual essence which crosses all contexts and domains, making it an essential component in any discourse about Māori development. Wairua, is implicit in all aspects of life and is the element which makes up the unseen, but has the capacity to provide a sense of balance, achievement and well-being.

Te Papa: #Whānau

> there is an inextricable relationship between the social, cultural and economic emancipation of Māori on the one hand, and the revitalisation and maintenance of whānau structures on the other..... The whānau provides a culturally appropriate and nurturing context for Māori language, knowledge and culture... the future of Māori is very much the future of the whānau and vice versa (Smith 1995, p. 34).

There are essentially two descriptions of whānau. The first is whakapapa-based whānau and the second is kaupapa-based whānau. Whakapapa-based whānau refers to the customary Māori social structure based on a common source of descent or whakapapa (Walters &Walters, 1986). Kaupapa-based whānau refers to a class of non-customary cohesive Māori interests groups without ancestral links (Hirini, 1997). The whakapapa-based whānau continues to have a place of importance as all Māori have connections to such whānau.

This study focuses on both descriptions of whānau. The transfer of whānau values and attitudes from one group to another is a relatively natural concept for Māori given that their world view is essentially non-individualistic and relies heavily on collective action and responsibility (Patterson, 1992). Whānau are said to be operationalised through what members do and include aspects such as manaakitanga (caring for), āwhinatanga (helping) and wairuatanga (spirituality)

(Walters & Walter, 1986). This is commonly known as whānaungatanga. Durie (1994a; 1993) adds to whanaungatanga, suggesting that it is a sense of family cohesion where whānau ties and responsibilities are further strengthened. The importance of whānau as a social unit is of huge significance given that they operate collectively to manage resources, organise family events, provide support for one another, culturally, socially (Metge, 1995) and financially (Taiapa, 1994), and include taking shared responsibility for child-care (Metge, 1995).

In summary whānau is the source of a collective sense of commitment and responsibility, providing for the person the capacity to belong to a group.

Summary of cultural self-efficacy and the cultural framework

This chapter reviewed findings from research as it related to self-efficacy and culture. An explanation of culture is explored, as are the implications of how it might manifest itself within societies. The findings are then discussed in terms of their relationship to teaching and impact upon minority students operating within a majority culture. Several studies proposing teaching strategies to overcome minority alienation are examined. Central to this present study is the utility of self-efficacy to help explain the behaviour of students' self-efficacy within their own cultural learning context. Hofstede's (1986, 1989, 1991) studies provide an analysis of cultural value systems across forty countries. He proposes four dimensions in which he claims cultural differences exist between self-efficacy appraisals. These findings are considered with the intention of identifying which dimensions might best fit the sample group of the present study. Finally, He Huarahi Ako, a Māori teacher education framework, is proposed to not only help conceptualise self-efficacy using key Māori concepts, but more importantly to propose a framework that may have utility in measuring the degree to which a teacher education programme for future Māori teachers may be valid or successful.

ko te pu
ko te kauru
kei te hiahia
kei te karonga
ko Rongo ma Tane
Turanaraua-a-Nuku
Turanaraua-a-Rangi
Te Rangi-e-tu-nei
Te Papa-a-takato
E ngā tauira o te wananga
whakamau whakamau
ko te ingoa o Io
O io i te wananga
Tihei Mauri Ora

(Pei Te Hurinui Jones)

The following section is a brief introduction to the wider context of Māori education and thus includes; education in traditional Māori society, Māori university graduates and finally issues of research as they relate to Māori. This section was considered necessary to provide both a historical as well as cultural context for the study. In essence the researcher recognises this study has links with the past which should not be overlooked.

Education in traditional Māori society

Māori life in traditional times was based on a communal lifestyle. Therefore, it was particularly important that the roles designated for each family or individual were carried out successfully. In essence, it was a society that had to work collectively in order to sustain life and to achieve communal goals and aspirations. In traditional society, the emphasis was placed on group effort and persistence, not on individual performance. Learning was not for individual gain but for tribal benefit. Learning was important and consisted of knowledge of ancient history, religious practice and the transmission of higher mythology which involved formal instruction based on a systematic curriculum. This level of learning was taught at the Whare Wānanga level where instruction was exclusively by lectures and recitations. The student was required to memorise exactly the knowledge being transmitted (Benton *et al*, 1995). Such knowledge was considered important and entry was therefore, confined to members of chiefly lineages.

An important part of the learning session in earlier times was the role and importance of Karakia. Karakia had a special role and when learning was about to take place, special Karakia were recited. Karakia was said to prepare the learners and teachers for the tasks ahead. Thus Karakia prepared the learners mentally,

physically and spiritually for the learning session (Benton *et al*, 1995; Best, 1986; Smith, 1913). There were special Karakia for different occassions and for different purposes within the learning session. Karakia usually began the session as well as concluded the session. Karakia is still considered an important aspect of the learning session within all levels of learning and teaching (from Kohanga Reo through to Whare Wananga) even today.

Higher forms of knowledge are attributed to Tane, who was said to have ascended from the heavens and obtained three baskets of knowledge. The first basket contained sacred lores and rituals; the second contained the knowledge of evil things; and the third contained knowledge of peace and associated arts (Best, 1934). Tane, therefore, is seen as the creator of knowledge.

As far back as 1934, Best described the Māori mentality as highly impressive, acute, and possessing remarkable powers of comprehension. He also stressed that Māori powers of memory were undoubtedly great. He cited the examples of two koroua (old men) one: was able to recite 406 songs from memory; the other could recite over 1400 names of ancestors and tribal members. Such powers, he thought, were the result of centuries of training, absence of the written mode, shared with the desire to perpetuate certain forms of knowledge. Best claimed that the many advantages of the Māori communal mode of life were weakened when they came in contact with the European lifestyle.

Traditional Iwi Māori learners used a wealth of strategies in order to learn. Such strategies relied heavily on visual and oral strategies. It was essentially an oral and visual culture. Key strategies were developed for recall, storage and retrieval of information. Tribal histories and knowledge was passed down by word of mouth in various ways such as waiata, storytelling, speech making, genealogy, and art forms.

Waiata (song) was probably the first form of formal learning to which children were introduced. They would learn genealogy from the lullaby, usually written specifically for each child, telling them either about their birth, their lineage or how much the child was loved. Other waiata told of love, tribal knowledge, heroes and heroines. Other such forms were mōteatea or poetry, which marked events and or tribal liaisons (Ngata, 1961). Storytelling was yet another strategy and was most often used as a way of remembering events, names and significant tribal landmarks. Storytellers were highly regarded tribal members not only for immense knowledge but also for their ability to entertain and pass on knowledge. The art of speech-

making was a very important skill and task. Indeed having a knowledge of genealogy and art forms was revered. Rote learning and memorisation were all-important learning strategies used by Māori.

The marae as an academic institution

Marae are places where the traditions of Māori are kept. Knowledge of tribal lores, language and customs were not merely isolated instances but were very carefully handed down through lines of descent (Ngata, 1968). To ensure the continuation of this knowledge, learners had to be well versed in the language of their tribal group and also demonstrate that their minds were sharp and able to retain and pass on the knowledge of their forbears.

Academic knowledge and a higher level of cognitive functioning have always had an important status in Māori society, not only was it important for individuals but also for their Iwi, Hapū and Whānau. Such skills of intellectual functioning and knowledge were exercised regularly. This was most often seen in the scholarly articulation of speech-making and welcome calling on the marae. In past times, the marae was a focus for learning, and students were engaged in learning that was practical and appropriate for learners and their communities' needs.

A history of Māori university graduates

It has only been a little over one hundred years that the first Māori from a non-Māori university graduated. Since then there has been a steady but slow increase in the number of Māori who have graduated from Universities and other tertiary institutions. An attempt to understand this particular group of students and their needs was carried out by Fitzgerald in 1977. He essentially found out that Māori university graduates are able to 'participate simultaneously, alternatively, and situationally in both Māori and non-Māori spheres' (p. 18). Based on his findings, he described Māori graduates as having both Māori and non-Māori cultural patterns. Essentially this meant they were able to switch perspectives according to their situation which he called 'dual acculturation'. He went on to explain it as a rather 'complex interaction of social factors' (p.18). This situation basically remains the same for Māori university students today.

The first Māori graduates from university were all male and all graduates of Te Aute College. In 1893 Apirana Turupa Ngata was the first Māori to graduate from university. John Thornton, the principal of Te Aute college of which Ngata was a pupil, was instrumental in fostering academic achievement amongst the boys in his care. His idea was to resocialize them radically which meant an education

'involving a thorough reconstruction of the personality characterised by non-democratic processes and by dominance' (Fitzgerald, 1977:p. 27) He outlawed Māori language and customs, and only allowed them to be used on certain occasions. He considered a rejection of Māori culture as totally necessary for them to gain access to the mainstream culture. However, even though their education was designed to make them European in sentiment, they still maintained essentially Māori characteristics (Fitzgerald, 1977).

Fitzgerald went on to compare the first group of graduates with graduates from the 1960s. The 60s graduates perceived their role as a symbol of success on equal terms with Europeans. As with the first group, the 60s group indicated a sense of 'conflict over status equivalence and cultural integrity' (p. 32). Both groups wanting to retain the 'best of both worlds'. Nevertheless, there appeared to be a movement towards becoming 'less an example of social status equivalence and more a symbol of the achievement of cultural integrity.' While there has been no information about recent graduates it may be similar for them also.

A collection of twenty stories from present and former staff and students of Te Kupenga o te Mātauranga indicate that Māori cultural achievement and integrity are important themes (Goulton-Fitzgerald & Christensen, 1996). All the contributing story writers indicated their desire to achieve cultural integrity, both during their college education and afterwards. Most believed however, it was part of the institution's responsibility to help them achieve this. Most of the writers believed that the building of Te Kupenga o te Mātauranga marae had made an important contribution to their teacher education programme, one, because the institution in a sense validated their form of cultural expression, and two, because it gave them access to the marae as a learning institution. This study focusses on students who are presently enrolled in a teacher education programme at Te Kupenga.

Māori research

Māori research is not a new paradigm. It has been marked since the beginning of time. When the children of Ranginui and Papatuanuku sought light they debated and worked out how this might happen. Tane in his pursuit of knowledge also sought ways of seeking knowledge through negotiation and collaboration. Down through the ages Māori have continued this practice of research. Unfortunately there has been a period in history where Māori became the researched, and the outcomes for Māori shifted from one of inclusion to one of exclusion and representation to misrepresentation. Hence recently there has been a proliferation of papers re-constructing the research ground for Māori.

From the evidence I suggest that there has been essentially three approaches from which Māori commentators of research come from. Approach one is aimed essentially at challenging the nature of studies and the qualifications of the researchers that describe them. Approach two, emphasises the affirmation and development of indigenous models and methodology, and approach three aims at describing and proposing Māori relevant research methodologies and the extension and reinforcement of the traditional knowledge bases (Te Awekotuku, 1991). As a result of all of the above, Durie, (1996) sees that Māori research programmes have undergone rapidly expanding Māori theoretical paradigms. Most if not all commentators discuss and explore all of these approaches.

An example of approach one is provided by Durie (1996) who advocates that researchers need to demonstrate a significant degree of cross cultural understanding. Banks (1988) similarly refers to researchers as being 'cross culturally competent', which includes them being able to understand the importance of key cultural concepts and their contextual relationships. These may include, in a Māori situation, for example, whakapapa (genealogy) language, and customs.

Bishop and Glynn (1992) provide evidence of approach two when they propose that educational research can be both collaborative and interactive and can be implemented at the level of individual and small-group settings and that these methodologies should be empowering and emancipatory (Carr & Kemis, 1986).

Māori research has been able to develop further in the wake of feminist research methods. This has meant a shift away from the traditional positivist research methods towards empirical, ethnographic and case study research methods. Carr and Kemmis (1986), say that these methods may be more effective in improving the lifestyle and life chances of the researched communities. For Māori, such approaches allow for the diversity that exists between and within Iwi, Hapū and Whānau.

It is important that research methodology reflects Kaupapa Māori, especially if the research is about Māori. Such an approach might include for example, the position of the researcher, the validity of the research design and the protocols set out by the researcher. Accordingly, this present research seeks to reflect some elements of a Kaupapa Māori approach. These are outlined in this studies research principles. Furthermore the researcher recognises that there is no such thing as a view from

nowhere; researchers have a view and most often from a 'situated vantage point' (Meyer, 1997). Researchers need to state their position because it is from that position that one views the world. That researchers are able to remain neutral is difficult to comprehend. How we view the world, our experiences, our perceptions all count for something, particularly in research. Therefore, the present research is guided by the following principles:

He Huarahi Ako Research Principles

i. the research should make a positive contribution to the development of Māori student teachers
ii. information and knowledge is shared between the researcher and the participants, and with the education community
iii. the research approach adopts a position of equal power relations. In this, the researcher will not use status to coerce participation, nor will this research in any way affect participants' study
iv. The research approach is open and honest, but ensures that confidentiality and anonymity of the participants is preserved
v. At all times, Tikanga Māori will be observed. This includes using Te Reo Māori when appropriate, acknowledging the importance of Kai in meetings, observing Karakia.
vi. Consultation, negotiation and collaboration are considered important elements in both the design and procedures. Talking with other Māori within the University is considered essential.
vii. The research will empower Māori student teachers in that they will feel a sense of ownership, and value in the research for themselves, and for those who follow them.
viii. The research is perceived as real and not contrived.
ix. The dignity or Mana Tangata, of the participants will be preserved, including respect for participants as well as providing support for their future academic pursuits.

This study takes on the idea of a 'kaupapa Māori' view for change within a university setting. While it is not about change in itself, it is about how change can be sourced and how the goals articulated by students can be achieved. Central to this change is the influence that Māori student teachers' self-efficacy (academic and cultural) has on how motivated they will be to succeed, how persistent they will be in tackling challenging circumstances, and how effectively they will perform. In

short, Māori student teachers' beliefs are important indicators for their future success.

This chapter started with Sir Apirana Ngata's philosophy for the transformation of Māori towards biculturalism

> *Grow tender shoot for the days of your world!*
> *Turn your hands to the tools of the Pākehā for your physical well-being of your body.*
> *Turn your heart to the treasures of your ancestors as a crown for your head.*
> *Give your soul unto God the author of all things.*

In these often quoted lines, Ngata encouraged Māori to grasp the knowledge of the Pākehā world for their livelihood, but also encouraged them to seek the treasures of their Māori cultural roots, as he believed it was essential for a sense of pride in Māori identity and spiritual well-being. These lines have particular relevance for student teachers as they prepare and seek out their future destinies.

CHAPTER THREE

Ka haere tāua ki Te Kupenga
ki te rapu mātauranga e.
Hei rākau mō taku iwi
kia rite taku moemoeā.

METHODOLOGY

This study attempts to identify and examine the factors that affect Māori student teachers' academic and cultural self-efficacy within a teacher-education programme. Two principal kinds of data were gathered: quantitative data using social survey methods (questionnaires given to sample group at a hui), and qualitative data collected from participant-observation, and formal interviews. The methodology for this study is developed in light of the participants' cultural background and the setting in which the study takes place. This chapter describes the participants, outlines the procedures undertaken, describes the tasks used in the study and discusses the methodology.

Aims of the research

The main aim of this study is to identify and examine factors that affect Māori students' academic and cultural self-efficacy. The second aim is to formulate and articulate a tentative Māori teacher education framework. The items used to measure the self-efficacy of these student teachers were developed by Albert Bandura (1986) and used extensively in other research projects, (e.g. Bandura & Jourden, 1991; Salomon, 1984; Schunk, 1989,1991, 1996; Schunk & Hanson, 1985; Schunk, Hanson, & Cox, 1987; Zimmerman, 1995). The Māori teacher education framework was developed to ensure that appropriate epistomological methods were used. This framework then helped the research identify key concepts in teacher education.

Setting and research participants

The site of this study is a University College of Education campus that provides a nationally recognised three-year Diploma of Teaching preservice programme for the purpose of provisional registration as a primary teacher. The College has very recently merged with the local University and is presently undergoing considerable

change, both structurally and organisationally. The campus has a marae, Te Kupenga o te Mātauranga, the first marae to be built on a university campus. This marae opened in 1980 and is an integral part of the College. It has become an important focus not only for the wider Māori community but also for the wider educational community.

The following discussion provide a brief overview of the history of Kaupapa Māori at this College of Education. The College's approach to Māori Teacher Education has been different from other colleges. The approach came mainly from the growing demand from the wider Māori community for quality education programmes embedded in Māori content approach and philosophy (Goulton-Fitzgerald & Christensen, 1996). In 1974, a Māori Studies Department was established and in 1980, the wharenui, Te Kupenga o te Mātauranga was built. In 1988, Te Ataakura, a course for fluent speakers of Māori to prepare for secondary school teaching, began. In 1990, a Bilingual Department was established to prepare student teachers to teach in bilingual classrooms, and in 1994 a Kura Kaupapa Māori Department was established whereby the entire programme is taught in Māori and student teachers are prepared to teach in Māori medium classrooms and schools. These initiatives have basically been activated and driven by Māori.

Essentially Kaupapa Māori at the College has meant the increasing use of Māori language and protocols. Up until 1990 any teacher who was fluent in te reo Māori had little choice about the teacher education programme in which they might enrol. Now, however, a person who is fluent in Te Reo Māori is able to take all their courses in Māori. The pool of Māori language speakers able to undertake the Kura Kaupapa programme, has dwindled since its first inception and so a bridging course for students who wish to opt for Kura Kaupapa has been made available. As a result, the Kura Kaupapa student teacher intake has met its annual target of about 20 student teachers each year.

The participants in this study are first year Māori student teachers enrolled in the preservice primary general teacher education programme. Table 2 summarises the number of Māori student teachers in all year groups and across programmes. A further breakdown of first year Māori student teacher numbers is provided.

Table 2. *Māori student teacher enrolments by programme, year group, and by first year group in 1997*

	All year groups		First year 1997
General teacher education (Primary School)	n = 93		n = 31
Secondary P.E teacher education	n = 1		n = 1
General secondary teacher	n = 3		n = 3
General teacher education Early Childhood	n = 16		n = 3
Te Tohu Pokairua (Kura Kaupapa Māori)	n = 57		n = 20
Total number of Māori students	n = 170	Total	n = 68

Approximately 46% of the first year intake of Māori student teachers are in general teacher education primary. Of the 31 possible participants in the study to be surveyed, 24 useable responses were returned. This represents a 78% response rate of all possible participants. One returned response was excluded because the participant was in the Te Tohu Pokairua (Kura Kaupapa Māori) programme and not the general teacher education programme. Attendance was by invitation, and seven possible participants did not respond to the invitation.

Table 3 summarises the data of those who participated in the survey. While a comparison between the participants and non-participants was not possible, the data suggests that the sample is characteristic of the Māori student teacher intake from which the participants were drawn.

Table 3. *Description of First Year Division A Māori Student Teacher participants by Gender, Age, Spouse, Children, Māori Studies Major*

Gender	Male	10
	Female	14
Age	18-22	7
	23-27	4
	28-32	3
	33-37	5
	38-42	4
	43 +	1
Children		14
Partners		9
Taking Māori Studies[2]	Yes	22
	No	2

Of the 24 participants surveyed, 22 are Māori Studies majors, which means that during their three years of teacher education they can expect to spend up to 22.5% of their on- campus course time in Māori Studies. The participants have identified themselves as being of Māori descent and all have listed one or more tribal affiliations. The age range of participants was fairly evenly spread between 18 and 43 years, with a mean of around 27 years.

The first year group of student teachers were selected because they were easily accessible, were largely known to the researcher, and formed a logical cohort of Māori student teachers for this kind of study.

The ability to generalise the results to all Māori student teachers is limited because:

1. this study is restricted to first year primary student teachers;
2. linguistic competency in Te Reo Māori varies between regions and tribes (Benton, 1979);

[2] Māori studies major refers to their subject studies selection. All student teachers select two selected studies option.

3. participation in this study is voluntary - no follow-up was conducted to ascertain reasons for non-participation;
4. the sample group is small.

In all this sample group was selected because of their ethnicity, year group, locality, and programme of study.

There were essentially two main sources of data: one from the survey, and the other from interviews. The participants for the interviews were selected on pre-determined criteria relating to academic self-efficacy and cultural self-efficacy. The factors associated with academic self-efficacy have been developed by Bandura (1986, 1977, 1990, 1993, 1995) and used fairly extensively by other researchers, (Bandura & Jourden, 1991; Salomon, 1984; Schunk, 1989,1991, 1996; Schunk, Hanson, & Cox, 1987; Schunk & Hanson, 1985; Zimmerman, 1995). The cultural self-efficacy dimension is unique to this study. Its veracity in terms of student teachers' cultural self-efficacy is yet to be determined.

Combining methods of research

This study elected to use both survey method and interviews to gather data. Therefore both quantitative and qualitative methods of research were combined. Due to the small sample number, engaging in full quantitative methods of analysis was not feasible nor was it desirable. Therefore qualitative data was also gathered and used to illuminate and augment the interpretation of the quantitative data.

In this regard, the qualitative approach was selected because it allowed an investigation of a student teacher's background, experiences, quality of relationships, activities, and situations to be teased out. Second, this approach attempted to describe holistically what has influenced or impacted on student teachers. Finally, qualitative approaches seem to have a consistency with kaupapa Māori as can be seen in the guidelines for qualitative research provided by Fraenkel and Wallen (1996):

1. it occurs in the natural setting
2. data are collected in the form of words as opposed to numbers
3. it is concerned with process as well as product
4. data analysis occurs inductively, therefore a picture is constructed as the research unfolds
5. it concerns how people make sense out of their life.

This present study was concerned with the instances and meanings that people give to their lives, as well as their attitudes and experiences. Parlett and Hamilton (1972), suggest that observation and interviews as methods are likely to be appropriate if one is going to attempt to make sense of the whole situation. Case study as an inquiry process hence enables deeper understanding of the situations to be revealed. Stake describes case study as a method that advocates an approach to research which is essentially 'responsive' in that it: responds more to programme activities than intents; responds to audience requirements for information; and responds to and reports the differing value perspectives of participants. The descriptions that arise are "complex, holistic, and involving a myriad of not highly isolated variables" (Stake, 1978). Given the above descriptions the researcher felt this method of enquiry was highly appropriate and so the design of this study attempts a responsive approach similar to that which is described by Stake. The researcher acknowledges the complexities involved, but realises they are an essential component of this study if it is to be meaningful and ecologically valid.

The strengths and weaknesses of case study as a design have been described as being "strong in reality" but difficult to organise. In contrast, other research data is often "weak in reality" but susceptible to ready organisation (Adelman *et al*, 1976). Case study is

> down-to-earth and attention holding, in harmony with the reader's own experience and thus provides a 'natural' basis for generalisation. A reader responding to a case study report is consequently able to employ the ordinary processes of judgement by which to tacitly understand life and social actions around them'. Furthermore they are a 'step to action'. They begin in a world of action and contribute to it. Their insights may be directly interpreted and put to use for staff or individual self-development, for within-institutional feedback, for formative evaluation, and in educational policy-making. (Adelman et al, 1976).

Field techniques

Kaupapa Māori at this College of Education has informed this study, not only from an historical perspective but also from a critical Māori perspective. This means that the methodology and procedures need to take cognisance of the participants and their sensitivities, both personal and cultural. The research considered a democratic approach (MacDonald, 1976) in that the research methodology and purposes were

made clear to participants, and their involvement was carefully considered. Participants were invited to check the accuracy of any written and summarised data, and were able to withdraw at any time. Lather (1986) called this face validity, whereby descriptions, emerging analysis and conclusions are checked by the participants.

Participant observation

Information from both written and oral sources were collated to form a description of the site, setting and personnel. The researcher is a former student of the institution and has been a part-time teaching member of the institution for the past eight years, teaching core education courses with mainly Māori student teachers. Therefore, this study is carried out not only with a working knowledge of the institution and the target sample population, but also with a spiritual (kaiāwhina) connection to Te Kupenga o te Mātauranga.

This study has four distinct phases:

Phase one: Literature review

Phase two: Development, administration, and analysis of the questionnaire

Phase three: Interviews with a selection of four questionnaire participants

Phase four: Analysis, discussion, conclusions, and recommendations of the study.

The data collected for this study are drawn from two main sources: a scoping survey (phase 2) and interviews with selected individuals (phase 3).

Phase one: Literature review

Theoretical search: A literature review of previous studies specifically related to self-efficacy informs the research discussion and the theoretical stance of the present study. This study attempts to adapt the notion of self-efficacy to an academic as well as cultural context. This, in turn, is used to develop the tentative Māori cultural framework. Self-efficacy in this study is being used as a theoretical indicator of student teachers' actions, feelings, and performance within both the academic and cultural setting.

Historical search: To gain some historical perspective about the concept of Māori student teachers, references were reviewed from early writings on traditional methods of learning, (Benton, Benton, Swindells, Crisp, 1995; Best, 1986; Buck, 1950; Grey, 1971; Metge, 1984; Smith, 1899) to gauge whether traditional

practices still have relevancy today as methods of learning. Other sources were able to tap into Māori university graduates such as T Fitzgerald (1977) who was able to provide findings from a comprehensive study. *He Taura Here Tangata* (Goulton-Fitzgerald & Christensen, 1996) pulls together some of the threads developed in this study by providing contributions from past student teachers spanning twenty years in which the contributors reflect not only on the Māori cultural aspects of the College of Education but also on the wider College institution .

Phase two: The survey

The major purpose of the survey was to identify characteristics of the target group in both academic and cultural situations. The survey method was adopted for several reasons. First, it was economical both in terms of time to complete by the participants (approximately 45 minutes) and it also allowed for quicker analysis procedures to be used by the researcher. This was achieved by using a combination of Likert scales and short answer questions. The short answer responses were later clustered and the strength of the issues were able to be identified. Second, the participants were able to respond anonymously and hopefully participants felt that they could answer honestly without fear of being identified. As a research tool the survey was valuable in that it gathered a wide range of information from a number of participants within a short period of time. The survey was set to be run during a lunch hour.

Prior to the proposed Hui (meeting), an invitation was sent to the target sample group. A return slip asked them to indicate their interest in attending. Most replied verbally that they would attend. Other methods of informing student teachers about the survey were considered but because of confidentiality, anonymity and the likelihood of perceived coercion, student teachers were contacted through the student teacher directory and individual student teacher college boxes. While the researcher was confined to limited means of contacting possible participants it was felt that the level of participation by the sample group was due to knowing who the researcher was. Furthermore the researcher did not want to compel participation so did not consider mailing out to those who did not attend during the survey time. One participant asked to complete the survey after the Hui and this was made possible.

The questionnaire

The questionnaire items were essentially derived from the research questions. Within the questionnaire, the items are grouped in areas with common dimensions. Response formats included check boxes for multiple choice, Likert rating scales, and short answer open-ended comments. The Likert rating scale used a consistent four-point scale. Likert scales provide an excellent means of gathering opinions and attitudes and they can be related to terms other than agree or disagree. As well Likert scales provide a great deal of information which is simple and effective to analyse (Anderson, 1990).

The issue of including a neutral mid-point as in a five-point scale was considered. However, the researcher was keen for the participants to indicate a response one way or the other. The questionnaire consisted of 84 items, (see Appendix A) arranged in nine sections:

1. Personal Information
2. Te Reo Māori
3. Tikanga Māori
4. Prior Learning
5. Personal Learning Information
6. Learning Environment
7. Learning Strategies
8. Learning Tasks: relating to the Professional Studies course undertaken in semester one
9. Cultural Perspectives on Learning

Within each section some questions targeted academic self-efficacy and cultural self-efficacy, attribution, motivation, learning preferences, Whānau influences, past educational experiences, Māori learning experiences; and tasks related to the Professional Studies course.

1. Personal Information. This section includes questions adapted from the Māori Identity Scale, developed in a Social Preferences Study (Ratima, Potaka, Durie & Ratima, 1993). The scale was a tool designed to assess acculturation, and uses a range of familiarity questions based on a range of identifiers, such as te reo Māori (Māori language), iwi (tribe), Māori community involvement, and whānau (family). Also included in this section were questions of a personal nature relating to age, gender, and student teachers with children. These questions were used primarily for describing the characteristics of the sample group.

2. *Te Reo Māori.* This section consists of six items, some of which have been adapted from the *Te Hoe nuku Roa* study. These questions attempt to gauge the level of Māori language proficiency, student teachers' perceived capabilities in learning Māori, and the importance to themselves as teachers of being able to speak Te Reo Māori for. These questions were developed specifically for the cultural self-efficacy framework. All but three of the survey participants were learning Te Reo.

3. *Tikanga Māori.* The Tikanga questions relate mainly to student teacher's involvement in tikanga, how it influences decisions both past and present, their confidence in mainly Māori situations, and perceived level of importance placed on tikanga. These questions were used in the cultural self-efficacy framework outlined in the previous chapter. All questions are measured on a four-point Likert scale.

4. *Prior Learning.* These questions are primarily based on attribution theories of success and failure as perceived by student teachers. The student teachers were asked to indicate on a four-point Likert rating scale those items which they believed illustrated their attributions for successes and failures. Two questions from this section were used to measure academic self-efficacy. Negatively stated items (e.g., question 30) were reversed spread so that high scores indicated a high influence on explaining failure. All questions are measured on a four-point Likert scale.

5. *Personal Learning Information:* This section relates to student teachers' motivation, their confidence in an academic situation, their perceived capability, and how they feel when engaging in an academic task. Other questions related to learning preferences, strategies student teachers use while studying, perceptions of lecturer influence, and culturally- relevant protocols in the learning situation. Two questions from this section were used as measurement items to assess the student teachers' academic self-efficacy. Some of the questions were on the four-point Likert rating scale; other questions invited open-ended responses.

6. *Learning Environment Information:* This included questions about where student teachers study most, and the importance of karakia in these student teachers' learning. Information from some of these items was used in the cultural self-efficacy framework. Some of the questions were on a four-point Likert rating scale, others invited open-ended responses.

7. *Learning Strategies:* This included questions related to learning strategies, student teachers' goals, the amount of time spent on tasks, and beliefs of their capability to achieve these goals. Some items were on a four-point Likert rating scale; others were multiple choice.

8. *Professional Studies:* These questions related to three professional studies assessment tasks that student teachers were required to complete during semester one. This section provides a specific context in which to measure student teachers' academic self-efficacy. The same questions were asked about each of the three tasks. There was an attempt to determine whether there had been an increase in the academic self-efficacy of the student teacher as the course progressed. All but one of the questions were on a four-point Likert rating scale. One question invited open-ended responses.

9. *Cultural perspectives on learning:* The final section of questions were Individual and or Group responses which were specifically related to the College Marae, Māori learning contexts, and what student teachers thought the University could do to support their success while at university.

The content validity was strengthened by reference to the review of literature and collegial consultation which helped sharpen agreed content relevant to the study.

The survey was conducted out of class teaching hours at the College Marae. The survey took approximately forty - five minutes to complete and, in accordance with the University Ethics Committee requirements, an Information Sheet outlining the study and its intentions was presented to the participants. A lecturer from the Department of Māori and Multicultural Education assisted in the administering of the questionnaire. The session began with karakia, followed by mihimihi[4] and a description of the research aims and procedures. The student teachers were then invited to participate either by completing the questionnaire immediately or taking it home to complete. As dictated by custom, lunch was provided. Two student teachers who were interested but not Māori came to observe. Three people chose to complete the questionnaire at home.

Phase three: The interviews

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[4] Mihimihi, karakia, and kai are customary practises when hui are held, because when people meet it is customary to cater for their spiritual well-being, and intellect well-being as well as their physical well-being.

The purpose of the interviews was to gain further information from the sample group by exploring in greater detail student teachers' academic and cultural self-efficacy (see Appendix B for interview schedule). The participants for the interviews were selected according to the predetermined criteria. The interview participants represent the highest and lowest polling participants in both the academic and cultural self-efficacy measurements.

Four participants from the survey were required for follow-on interviews. These participants were selected on the basis of their questionnaire responses. The survey data provided indicators of the academic self-efficacy and cultural self-efficacy of each of the participants. The invited interview participants were the two from the survey who polled the highest and lowest score from the academic self-efficacy indicators and the two who polled the highest and lowest from the cultural self-efficacy indicators. It is important to note that the measurement of self-efficacy should not be confused with the intellectual ability of these participants. It should also be noted that these interview participants were not necessarily the strongest or weakest academically or culturally from the sample group. The participant's highest academic qualification was also considered as it provides information about their past performance accomplishment. The interview participants were given pseudonyms to protect their identity. The highest polling academic self-efficacy participant is known as Rua and the participant who polled the lowest score is known as Iwa. The participant who scored the highest in the cultural self-efficacy indicators is known as Rima and the lowest scored participant is known as Waru.

The interviews provided an opportunity for the researcher to probe in greater depth the participant's background and experiences in both academic and cultural settings. As Patton suggests

> we interview people to find out from them those things we cannot directly observe. We cannot observe feelings, thoughts, and intentions. We cannot observe behaviours that took place at some previous point in time. We cannot observe how people have organised the world and the meanings they attach to what goes on in the world. We have to ask people questions about those things (Patton, 1990)

This reinforces the view that expectations of Māori student teachers should not be dependant on ethnicity alone but that other factors such as their background and experiences should also be considered.

The interviews were approximately one hour in duration. They were fairly structured and based on the academic and cultural framework of the study. Interviews were conducted by the researcher, and were audio taped with the consent of the participant. The audio tapes were subsequently transcribed.

Interview transcripts were analysed in conjunction with Bandura's self-efficacy model (1995) and from the emerging self-efficacy cultural framework. In as much as was possible, the original meaning and intent of participants interviews was preserved. Stenhouse (1981) reminds the researcher that one should not 'drag the reader on to the territory of his own mind, but rather goes out to meet him'. Following the transcriptions of the interviews, participants were asked to read the transcription and note any errors or misconceptions. Methods of triangulation of data for reliability and validity of data was considered during the interview and participants were asked to develop further if they wished, on any of the information presented in their questionnaires. Lather (1986, p. 270) suggests that the researcher must consciously utilise designs that allow counterpatterns as well as convergence if data are to be credible. Throughout the interview process, counterpatterns and convergence were able to be sought by seeking clarification, modification or explanation. During the interviews participants were encouraged to respond or clarify any points they made, as well as delete any information they did not want recorded.

Essentially the researcher used a combination of educational, psychological, and anthropological techniques during the data gathering process. The main aim was to be informed by the theoretical underpinnings of the study but not to be controlled by them. Collecting adequate descriptive data was important as was remaining focused on a defined sample group and detailing accurate information.

Validity and reliability

Validity in this study has been enhanced by using appropriate methods of contacting people, offering English or Māori as a medium of communication, and following tikanga Māori protocols. Furthermore, the researcher has had a long association with the customs and practices of the College of Education and with the student teacher population.

One of the goals in this study, was to minimise biases and thus required the research to be open to scrutiny while also flexible in design. Yin (1991) suggests

that research procedures and data collection procedures should be developed in such a way that the study is transparent and is able to be replicated. With this study it is relatively easy to replicate either with the same group or with a similar type group.

Participants' input was sought both before, during, and after the study. Seeking and clarifying participants' opinions and views was considered important. Sometimes when researchers have set agenda, participants can be led to respond in a particular sort of way. Lather (1993) claimed that

> the researcher needs to be critically aware of how pre-conceived theories may affect the research and interpretations of the data. It necessitates a dynamic view of theory, where there is a dialectic relationship between theory and data, where the researcher's perspective can be altered by the logic of the data.

While this study does have some pre-determined questions and structure, the researcher attempted an interpretative approach and let the data 'do the talking'.
The case study methodology for this research attempted to be inclusive but not intrusive, empowering not disempowering, as well as collaborative. All participants were Māori, and the setting, although within an academic institution, was on a marae.

Piloting the questionnaire

Before the questionnaire was administered it was piloted with two first year University students, and one first year Kura Kaupapa student teacher. Questions 57-82 were not piloted however, as they were specifically related to the Professional Studies course. Piloting enabled the utility and veracity of items to be checked, as well as any item equivocation to be resolved. As a result, some minor changes were made to the questionnaire. Both research supervisors, along with two other colleagues and a university research officer, also provided professional comment on the questionnaire.

Ethical considerations of the study

University Ethics Committee approval was sought. Ethics Committee approval was necessary as the researcher was considered to be in a position of power over the participants. Approval was given on the following conditions. One, survey participants were to be informed that involvement was voluntary, and information

would remain confidential and anonymous. Two, an information sheet outlining the study (see Appendix C) was read, and questions were invited. Three, participants who were willing to carry on with the survey were asked to sign consent forms. Four, participants could complete the survey during the lunch meeting or take the survey home to complete. Finally, student teachers could not be sought to participate.

Because the sample was small, anonymity was a difficult issue. The questionnaires were coded alphabetically as they were returned and received a coding S.a. to S. x, representing the twenty-four participants. Box numbers were recorded for further contact for those who would be willing, if asked, to continue the interview phase of the study.

The target group of student teachers for this study is a convenience sample. This raised some ethical issues, particularly involving lecturer and student relationships, and the potential for coercion. Participants were free to respond immediately or at their own leisure. In doing so, they continued to have the opportunity to withdraw their consent to participation without consequence. At the time of the survey, the researcher's teaching involvement with these student teachers had been withdrawn.

Perceived outcomes of student participation

It is hoped that, participation provided a forum for student teachers to examine their own beliefs about education and academic tasks. The researcher is committed to just not taking for the purposes of her own research, but also to doing something to empower Māori learners involved in teacher education. It is hoped that the research may be beneficial for a variety of audiences, especially for the participants, for Māori, for teacher education, and for teacher educators. Lather (1986) takes this idea further, describing it as catalytic validity. She maintains that it is ..."the degree to which the research process re-orients, focuses, and energises participants" (Anderson, 1989, p. 259).

This research will achieve this kind of catalytic validity, if as a consequence of the study, student teachers begin to take a more active role in their learning, and are more able to perceive and articulate their learning needs. Furthermore, catalytic validity may be achieved if the participants as a consequence of their involvement in the study perceive that postgraduate study is an attainable and viable option.

Collaboration with other Māori and academic staff

Collaboration with other Māori and academic staff was considered to be important. This study was presented at a staff meeting of the Māori and Multicultural Education Department, a department within the university College of Education. The researcher explained the purpose of the study, and invited comment and guidance mainly to ensure ethical issues relating to Māori were appropriate. Informal discussions with other academic staff within the university were also held.

Analysis of results

In her book, *Black Feminist Thought*, Collins (1991) names four contours or characteristics of her race-based epistemology, namely concrete experience as a criterion of meaning , the use of dialogue in assessing knowledge claims, the ethic of caring, and the ethic of personal accountability. To an extent, this study, attempts to encompass similar characteristics, first, by developing its own cultural framework and, second by incorporating Collins' contours as a valid way of analysing data.

The collation of the results was developed as a coherent set of information as proposed by Campbell (1975), which he calls 'pattern matching'. He describes this approach as gathering information from the same case which may be related to some theoretical proposition (see Yin, 1989). The data are then linked to the proposition and the criteria for interpreting the findings. The theoretical proposition in this study is that

> Percepts of ability are formed as individuals attempt and complete tasks. However, Bandura (1986) argued that people are more influenced by how they interpret their experience than by their attainments *per se*. For this reason, self-efficacy beliefs usually predict future behaviour better than does past experience. Prior experience influences subsequent behaviour largely through its effect on self-efficacy beliefs, and these can influence performance 'independent of past behaviour (p. 424)

This sample group is not considered big enough to warrant substantive quantitative data analysis. However, there is sufficient information to necessitate a procedure that allows for the grouping of responses. Data from the interviews were analysed in the themes similar to that of the questionnaire. The results chapter reports the findings under two main headings, these are:

1. academic self-efficacy and;

2. cultural self-efficacy

CHAPTER FOUR

Anei rā te rōpū ākonga
e mihi atu nei
ki a koutou e te iwi
Nau mai!
Manaakitia mai
ko te taonga nui e
ko te whare
whakamana i a tātou.

RESULTS

The results presented in this chapter are a combination of the responses derived from the survey, interviews, and observations. They are reported under two sections: Section one deals with academic self-efficacy, and Section two reports on cultural self-efficacy.

Characteristics of Māori student teachers

Out of the 24 participants only four came straight from school, while the rest had spent varying time out of school. There was a mixture of ages ranging from 18- 43 and over. Of the 24 participants, 14 had children who ranged in ages from 0 months to adults. All were in varying degrees involved in whānau activities during semester one, which for some meant time away from study. Seven said whānau activity often required being away from study; a further seven said sometimes; and one said a lot, and six others said not at all. Overall, they are a closeknit group who identify as Māori Studies students and refer to each other as the whānau.

Survey, interviews, and participant observations

Of the possible sample group, just over three quarters, 78% (n=24), responded to the invitation to attend a Hui (meeting) to hear about the research. All who attended agreed to participate in the study. The data suggest that the sample is characteristic of the Māori student teacher intake from which the participants were drawn. Based on information from the survey, four participants were subsequently selected for interview.

The construct of academic self-efficacy was measured by combining several items of the questionnaire. The first combination of questions was primarily concerned with Bandura's four sources of self-efficacy namely, past experiences, vicarious experiences, emotional arousal, and verbal persuasion, all of which were measured in the initial indicators of self-efficacy. The item indicating past performance was the student teachers' highest academic qualification, the vicarious experiences were related to the peer influence item. The verbal persuasion items were related to teachers and parents, and the emotional arousal items referred to confidence and how relaxed the student teachers were when engaging in academic tasks. The second measurement of self-efficacy was related to the Professional Studies course; a specific context for the measurement of academic self-efficacy, which also provides a more recent overall picture of participants' academic self-efficacy.

Academic self-efficacy indicators from survey results

Table 4 contains the actual questions from the questionnaire which were used to provide an overall indication of the academic self-efficacy levels of the sample group of student teachers.

Table 4. *Survey questions selected to represent indications of the overall academic self-efficacy of the participants.*

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1. What is your highest academic qualification? item # 29
2. How influential are the following in explaining your academic successes?
   - good peer influence (# item 30 g)
   - good teachers (# item 30 f)
   - supportive parents (# item 30 h)
3. Do you feel confident in a mainly academic situation? (item # 33)
4. When doing academic tasks, most times, would you best describe yourself as relaxed (item # 35)

Table 5 shows the distribution of the responses to these items.

Table 5. *Academic self-efficacy responses from the survey participants*

Items	Survey participant rating			
	1 (not at all)	2 (a little)	3 (a lot)	4 (extremely)
good peer influence	6	6	7	5
good teacher influence	1	8	10	5
supportive parents	0	6	9	9
confidence	0	12	7	5
relaxed	3	5	15	1

The responses for the item on academic qualifications were: 20% (n = 5) of the group had no formal qualifications; 20% (n = 5) had School Certificate; 37.5% (n = 9) had Sixth Form Certificate or University Entrance; and 12.5% (n = 3) had Seventh Form Bursary. Supportive parents were rated highly for contributing to academic success, with 37.5% (n = 9) rating four and 37.5% (n = 9) rating three. Only 20% (n = 5) indicated a two. Indications are that these student teachers were highly influenced by and received encouragement from parents, teachers and peers. As such, they can be considered to be major sources of self-efficacy.

To the question of confidence in a mainly academic situation, no one lacked confidence but only 50% (n = 12) of the responses indicated only a 'little confidence', and half the responses were split between 'feeling confident' and 'extremely confident'. In response to the question on feeling relaxed when engaging in academic tasks, over 66% (n = 16) indicated feeling relaxed. It is interesting that, although their levels of confidence are not particularly high, the participants tend to be relaxed. Overall, the student teacher's past performance accomplishments indicate low levels of achievement. Vicarious experiences were difficult to gauge from this data, although there are slight indications that these experiences have a fairly neutral effect, given that there was an even spread across the four indicators. However, in other parts of the survey (particularly the present environment), vicarious experiences were noted as being hugely influential. As noted, bouncing ideas off each other and having similar aged peers gave the participants a sense that

what their peers could do, they could do also. The emotional arousal items, however, indicated two sets of evidence about being mildly confident but reasonably relaxed.

Academic self-efficacy in context: Professional Studies as a case study

The following section relates to the items in the questionnaire about the Professional Studies course. There were four tasks which student teachers were required to undertake during the course. The survey covered questions concerning how the student teachers planned and felt during and after completing three of the assignments. The tasks were all different, although the survey questions were the same for each task. The questions probed in more depth the process of the student teachers weighing up and combining the factors such as perceptions of their ability, task difficulty, amount of effort expended (Schunk, 1986) and in particular their sources of emotional arousal all of which contribute to self-efficacy. The items from the questionnaire and the responses have been tabulated. Items which score 1 or 2 indicate a low response, and items which score 3 or 4 indicate a high response.

Summary of task one: Report of observations

Task one was a report based on observations of a child. Participants generally followed the instructions as per the guidelines for the tasks. Of the responses, 62.5% (n = 15) indicated initial degrees of uncertainty over how they might go about the assignment. The participants indicated the following strategies they used for completing the assignment:

- 62.5% read
- 50% sought peer support
- 8% took notes
- 20% talked with associate teachers
- 20% worked on making theoretical links

Participants noted that making theoretical links with practical situations posed considerable difficulty. This part of the assignment, they said, gave them the most trouble. Although these were the strategies that participants listed, in fact all were necessary to complete the task successfully, and to have passed they should have engaged in all of them.

Table 6. *Survey responses to task one: Observing a child*

Item	Survey participant rating			
	1 (not at all)	2 (a little)	3 (a lot)	4 (extremely)
Did your mark reflect fairly your effort	2	3	7	10
Did your mark reflect fairly your ability	6	4	7	4
How difficult was the task	1	7	14	0
Capable of completing a similar assignment	0	4	12	6
How enjoyable did you find the task	3	8	10	1
How stressful did you find the task	1	8	9	4
How anxious did you become during the task	0	9	12	1

On the whole, scores indicated that participants felt their marks fairly reflected their effort, although not all thought it actually reflected their ability. The task was perceived to be difficult, with over half, 58% (n = 14), indicating a 3 rating for task difficulty. There was an equal split between those who enjoyed the task and those who found it only a little enjoyable. Three (n = 3) participants did not enjoy the task at all. The majority found they would feel capable of completing a similar assignment if asked in the future. More participants found the task stressful than did not, with the bulk of responses rating either a 2 or 3, 16% (n =4), gave it a four rating. The item regarding anxiety was scored similar to the item about stress. More reported higher levels of anxiety than lower.

Summary of task two: Test

Task two was a one-hour test. Participants were asked to indicate how they prepared for this test. Responses were grouped into six items, with some participants recording one, two or more of these categories:

- 80% sought clarification during class
- 50% read fairly extensively
- 70% worked with others in groups outside of the tutorials
- 25% practised test writing
- 20% made notes
- 20% sought lecturer assistance outside class time

One participant did no preparation at all; 42% (n = 10) indicated a little; 29% (n = 7) indicated a lot; and 16% (n = 4) indicated considerable preparation. One participant reported that he/she wrote a practice essay, but was too shy to get someone to read it. Another reported having two other assignments due during the same week and feeling particularly pressured. Two participants sought academic advice from family members.

Overall indications from the test suggest it was the least favoured of the three tasks. Just over half indicated their mark reflected their ability, with 54% (n =13) scoring either a 3 or 4. However, there were 37.5% (n =9) who felt that their mark did not entirely reflect their ability: 25% (n = 6) rated 2 and 12.5% (n =3) rated 1, not at all. The task difficulty was rated by most as either a 2 or 3, with 37.5% (n = 9) finding it particularly difficult. The response to feeling capable of doing a similar test, was not as clear cut as the first task: 33% (n = 8) rated only 2; 46% (n = 11) rated a 3; only 12.5% (n = 3) felt very sure and indicated a 4 rating. The test was not enjoyed by the participants. Only 25% (n = 6) rated it a 3, and the rest were either 1 or 2 ratings. There were more 2 ratings for the stress item, suggesting that they did not become 'overly stressed', although 25% (n = 6) rated 3, indicating 'a lot of stress' and 12.5% (n = 3) rated 4, as becoming 'extremely stressed'. Anxiety levels were quite high, as a greater number indicated either 3 or 4 (66%, n = 16).

Table 7. *Survey responses to task two: Test*

Item	Survey participant rating			
	1 (not at all)	2 (a little)	3 (a lot)	4 (extremely)
Did your mark reflect fairly your effort	3	6	6	7
Did your mark reflect fairly your ability	7	4	8	3
Capable of sitting a similar type test	0	8	11	3
How difficult was the task	1	12	8	1
How enjoyable did you find the task	7	9	6	0
How stressful did you find the task	1	12	6	3
How anxious did you become during the task	1	5	11	5

Summary of task three: Paired oral presentations

Task three was a paired oral presentation. Of the three tasks, this was the most favoured. This task was well prepared for, as 75% (n = 18) indicated either a 3 or 4, 42% (n =10) indicated a 4.

Table 8. *Survey responses to task three: oral presentation, working in pairs*

Item	Survey participant rating			
	1 (not at all)	2 (a little)	3 (a lot)	4 (extremely)
Prepared for the presentation	0	2	9	11
Did working in pairs make a difference to learning	2	3	6	11
Was the difference more positive than negative	0	3	8	11
More capable of completing a similar type task	0	10	10	2
How difficult the task was	3	13	6	0
How enjoyable did you find the task	0	4	9	9
How stressful did you find the task	2	11	9	0
How anxious did you become during the task	2	10	7	2

There was overwhelming response that working in pairs made a difference to learning. Furthermore, it was more a positive than a negative difference. The task was not perceived to be difficult, as 66% (n = 16) of the ratings were either a 1 or 2, mainly 2 54% (n = 13). There was still some degree of hesitancy about feeling capable of doing a similar task, (42% (n = 10) rated a 2; 42% (n = 10) rated a 3; and only 8% (n = 2) rated a 4). The task was perceived the most enjoyable of all the tasks, with 75% (n = 18) ratings of 3 or 4. The task, although enjoyed, was stressful, with 46% (n = 11) rating a 2 and 37% (n = 9) rating a 3. There was a spread of anxiety with all four ratings being indicated by the participants. However, they were less anxious than was the case for task two, with a higher proportion rating a 2, with 42% (n = 10), and 29% (n = 7) rating a 3.

Summary of tasks

Results indicate that with all the tasks, participants felt more capable of doing a similar type of assignment again. Tasks one and three scored higher in questions relating to enjoyment. Of the three tasks, the test was the least favoured task, scoring much higher in the difficulty, stress and anxiety aspects, than the other two tasks. Three - quarters of the participants indicated working very hard on all tasks. There were two non-responses amongst the survey participants. One participant indicated withdrawing from the paper, adding that Professional Studies was so aloof that he/she forfeited the paper (this was one of the non-response participants to this section of the questionnaire). Another participant wrote that he/she read so much and got so engrossed he/she forgot to take notes, and consequently the assignment was handed in late. Another noted staying up all night to complete task 1 on time . Whether this was because the amount of time needed to complete was underestimated or whether it was left to the last minute is not clear.

These responses across the three tasks provided indications of varying levels of anxiety and stress, varied by enjoyment of tasks.

Collective efficacy

Collective efficacy, that is, a shared belief in their capabilities to attain goals (Bandura, in press) surfaced in a number of questions, and was offered as an explanation for how participants could succeed within the university environment. The participants tended to operate collectively within an interactive social system, rather than as isolates. They saw themselves as working in groups, working collaboratively and collectively. This they believed was for the common good of the group. This was evidenced in the out-of-class study groups they formed and the informal support systems they set up to keep each other on track for success, usually in small groups of three or four, or sometimes larger. Māori staff would also attend even when the work was unrelated to their courses. Furthermore, they indicated that working for Māori was an important aspect of their intention once trained. In item #39 of the questionnaire, participants were asked if their learning was enhanced when working with others. All agreed.

Participants met regularly at Te Haonui (the marae classrooms) and worked collaboratively on assignments. They noted that supporting student teacher colleagues who were struggling with courses as being important. One participant described it as 'sharing strengths'. They noted an awareness of each other's

strengths and weaknesses, and, depending on the particular course, the most able student teacher led the group in study. They described working together as providing a sense of direction and motivation. One participant said such a study group provided a safe environment to ask dumb questions and to check how off or on task you are. Another saw working in groups as being very supportive and highlighted how important it is for them to stick together, even if simply for moral support. They contended that they got support from and for each other which in turn meant they were included in whānau group activities.

A whānau group

During the semester, a highly developed sense of whanaungatanga had developed between most members the group when working together both outside and inside the college was apparent. This group operated as whānau in similar ways to that of a whakapapa whānau (Metge, 1995). They also believed that looking after each other's welfare was part of being in the whānau group. A student teacher in a failing position would be offered help. Enrolling at the College of Education together and completing together was yet another theme that was reflected in their responses. Overall, they appeared to have quite clear notions about what group participation and inclusion meant. Most of the sample group referred to themselves as being a member of the whānau. They explained, the whānau, as the group who were doing Māori Studies, Professional Studies, and other courses together. The single unifying factor was being a Māori Studies student teacher; this included non-Māori student teachers as well, although none of this present sample included non-Māori participants.

They noted that togetherness, whanaungatanga (family like), manaakitanga (caring), and tautoko (support) were important group concepts which helped them realise their individual potential, and hence contribute to their self-esteem and self-efficacy. They noted that allowing Māori concepts such as the ones noted above to flourish within the institution was a key issue for them and their success, just as having role models within the system who could ensure these ends could be met was highlighted as being essential.

Factors contributing to Māori student teachers' academic self-efficacy

The following sub-sections have been brought together to probe further how self-efficacy develops and how it is strengthened or weakened. The sample groups' perceptions and notions of their academic ability are examined further in terms of

attribution, motivation, learning strategies, learning environment, learning preferences, and learning tasks.

Explaining academic success

Based on the survey responses (item #30) participants were asked to rate on a 1 to 4 scale the personal attributions of effort, ability, luck, and difficulty. Table 9 shows how participants perceive their success.

Overall ability was the highest single attribution in explaining academic success. Effort, was offered as the next highest explanation, although only half attributed high effort level to explaining their academic success. In addition, 37% (n = 8) indicated academic success was due to the tasks being easy. Most believed that ability and effort were the key reasons for their success. Luck, to a lesser extent, was also considered to contribute in varying degrees to participants' academic success, 33% (n = 8) indicating 3 or 4. In summary, participants reasons for success favoured internal factors such as ability and effort, whereas external factors such as work difficulty and luck were low scoring factors.

Table 9 *Participants' attributions for personal academic success (item #30).*

Item	Survey participant rating			
	1 (not at all)	2 (a little)	3 (a lot)	4 (extremely)
Effort	4	8	6	6
Ability	0	4	14	6
Difficulty (easy)	8	7	8	1
Luck	7	9	5	3

Explaining academic failure

Based on the survey responses (item #31) participants were asked to rate on a 1 to 4 scale lack of effort, lack of ability, difficulty and lack of luck, as explanations for their academic failure.

Table 10. *Participants' attributions for personal academic failure (item #31)*

Item	Survey participant rating			
	1 (not at all)	2 (a little)	3 (a lot)	4 (extremely)
Lack effort	2	5	8	9
Lack ability	9	10	3	2
Difficulty	8	11	4	1
Lack luck	1	12	7	4

Table 10 provides an indication of the range of perceptions for explaining the academic failures of the participants. Participants generally perceived lack of effort (71% n = 17 rated 3 or 4) as being the highest single attribution influencing personal failure. Luck rated as the second highest factor (46% n = 11 rated 3 or 4). Lack of ability and task difficulty were rated low and not considered high reasons for failure. In other words, when experiencing academic failure most believed they had the ability but lacked the effort required.

Planning, aspirations and achievement

In planning to achieve success in assignments, participants were asked whether they planned a particular course of action (item # 49). Results showed 8% (n = 2) never planned; 50% (n = 12) deliberately planned sometimes; 29% (n = 7) planned a lot; and only 12.5% (n = 3) always planned. Considering the workload of the student teachers' where they may have up to seven courses to manage at one time, lack of personal planning could be an important factor in the level of students' academic success.

The participants were also asked to asses how much time they spent outside college hours working on college tasks.

On average per week student teachers spent: beyond class time

- less than 5 hours (20%; n = 5)
- between 6-10 hours (37.5%; n =9)

- between 11-15 hours (29%; n = 7)
- 16 hours or more (16%; n = 4)

If participants have 15 hours contact a week a rule of thumb assessment for a normal workload is between 30-45 hours beyond face-to-face. Only four participants indicated working 16 or more hours. In essence, this means that over half are spending less than 10 hours per week on college tasks, i.e., between one third and one quarter of the expected time.

These hours may be explained by the goals set by these participants. Participants were asked to indicate the percentage pass they aimed to achieve (#item 50 and #item 52).

Achievement goals for written assignments	Achievement goals for oral assignments
50% = 5 (20%)	50% = 5 (20%)
60% = 6 (25%)	60% = 4 (16%)
70% = 2 (8%)	70% = 1 (4%)
80% = 7 (29%)	80% = 6 (25%)
90% = 1 (4%)	90% = 3 (12.5%)
100% =3 (12.5%)	100% = 5 (20%)

Both types of assignments were similarly scored, although there were a greater number who aimed for higher marks in oral assignments. Nearly half, 46% (n = 11), of the participants aimed for either a 50% or 60% pass. Less than half the number of participants, 46% (n = 11), aimed to achieve higher passes, between 80 and 100%. These participants, in general, tended to have more successful academic backgrounds. When asked about whether they thought they could achieve these goals (#item 51 and 52) on the whole, most 75% (n = 18), participants thought they had the ability to achieve their goals. A smaller number, 20% (n = 5), however, were only slightly confident of their ability.

Participants in open-ended questions gave some reasons for their goals. Some claimed that juggling work, family and other life commitments was extremely difficult at times, so a pass was all they could possibly hope for. Others reported that their writing skills were weak, so could only hope for a pass. Time management, it seemed, was another key factor, some said they had not yet learned to use their time as wisely as they should. One participant explained that oral assignments seemed much more within their capabilities. Oral assignments,

provided them with the opportunity to present ideas which could be clarified on the spot. Another countered, that "teaching is about fronting up verbally," and so considered this activity as having greater status than written tasks.

Strategies

Participants were presented with a scenario about how children learn and develop. They were than asked to rate the strategies they would most likely use to help retain the information about how children learn and develop. Of the seven listed possibilities, four strategies emerged as being ones that participants favoured:

- writing notes (83%; n = 20)
- teaching someone else (79%; n = 19)
- mind mapping (62%; n = 15)
- keeping a journal (54%; n = 13)

Writing notes (83%; n = 20) and teaching someone else (79%; n = 19) were preferred strategies. On other tasks, participants noted reading, discussion groups, and time management as strategies they used to complete work.

Learning preferences

This section attempted to gauge the learning preferences of the group. Participants were asked to list the ways they preferred to learn about how children learn and develop. They were presented with seven scenarios and asked to rate on a 4-point scale their response to the approaches. A preference score was calculated by summing individual responses. The items which scored the highest were the items that participants scored either 3 or 4, low scores were ranked either a 1 or 2.

The top four learning preferences were:

- group discussion (96%; n = 23)
- tutorials in small groups (87.5%; n =21)
- observing (79%; n = 19)
- one - to - one dialogue with lecturer (58%; n = 14)

The results show that all four learning preferences were valued, although group discussions, tutorials and observing were generally highly scored. Likewise, one - to - one dialogue with lecturers were considered valuable 58% (n = 14), though of lesser importance than the other three.

Student teacher motivation

The responses to item # 32 of the questionnaire, regarding the participants' motivation for learning at the College of Education are shown in Table 11. The highest scored items were to become a good teacher and to do the best they can.

Learning Environment

Participants study mostly in their homes or flats (75%; n = 18). Te Haonui was used by (58%; n = 14) of the group from time to time, and the College library used by (58%; n = 14) of the group. Very few (16%; n = 4) indicated not having a fixed place of study. A comfortable learning environment and place for study were noted as being important, not only in physical terms but also in emotional and social ways. Participants were fairly unanimous that places for learning should be appropriate to the course. An example given was that Tikanga Māori is perceived to be learned better in the marae situation.

Table 11. *Top five motivating factors from survey (item #32)*

Item	Survey participant rating			
Desire to:	1 (not at all)	2 (a little)	3 (a lot)	4 (extremely)
be a good teacher	1	1	5	17
best one can	1	4	3	16
achieve well	0	3	6	15
help others	1	0	9	14
please the whānau	2	4	7	14
work for Māori	1	2	9	11
paid well	4	9	6	4
please lecturers	3	13	5	2

The final question in this series asked whether participants had ever doubted their academic ability (capability) because of their ethnicity? Over half the responses, 13, replied positively to this question. There was a 33% (n = 8) response who indicated they had never doubted their capability because of their ethnicity.

Academic self-efficacy: Interview participants

The following are the responses to the academic self-efficacy indicators from the interview participants.

Table 12. *Academic self-efficacy responses from the interview participants*

Items	Interview participant rating			
	Rua	Iwa	Rima	Waru
good peer influence	4	-	4	2
good teacher influence	4	2	4	4
supportive parents	4	3	4	4
confidence	4	2	2	4
relaxed	2	1	2	3
Total	18	8	16	17

Both Rua and Iwa were selected on the basis of these survey results. Following are brief descriptions of the interviews which probed their academic self-efficacy.

Rua

Rua (high academic self-efficacy) rated a four on all items except for being relaxed. Rua had Seventh Form Bursary and had come straight from school to university. She had received much support and encouragement from her parents, teachers and friends. Her parents, she explained, had ensured she and her siblings were given the best education which included being bussed out of the local area to another area during her primary school years; later she was sent to a private boarding school. During her earlier years she remembers working hard and more often than not found herself in the top twenty percent of the class. She had always received much

encouragement and praise from her parents and teachers and so was generally positive about her capabilities. During her secondary school education she attended two schools but changed after her fifth form due to homesickness and, in part, also to continuing conflict with the beliefs of some of her school peers. Most of her peers, she said, were quite racist and their attitudes were not what she herself aspired to. She noted that most of her peers did not know that she was of Māori descent. Her second secondary school was hugely supportive and she enjoyed it although it meant a two hour bus ride each day. She continued to work hard despite involvement in extracurricular activities during her senior years, and the view held by most of her peers that no matter how hard one tried it was virtually impossible to gain more than a 70% pass in Bursary exams.

Her interest in teaching came from experience of other relations and encouragement of her parents and teachers. She enjoyed young children and felt that she had something to offer them. Her younger siblings also contributed to her entering the teaching profession. In achievement goals at college she aims for 80% passes and feels that she is capable of achieving these goals. Rua is confident within the academic environment, although not totally relaxed.

Iwa

Iwa (low academic self-efficacy) scored a two on most items, although peer influence was not marked and supportive parents were scored at three. Iwa had spent some years out of school and had made a uninterested attempt at School Certificate, leaving school at the end of his fifth form. He later enrolled for Polytechnic courses and gained a Trade Certificate related to his job. He attended the closest local primary and secondary schools, which he said had a high Māori and Polynesian roll (67%). Iwa reported that academic success was not a priority at school and so left without any formal school qualifications. He also reported that 'non-pushy' parents and mediocre teachers and schools meant low aspirations all round.

> I was probably an underachiever in academic things. I wasn't interested. I never put enough effort in. I never expected anything back.

He considers lack of effort, the main reason for academic failure due to lack of motivation.

His main reasons for entering teaching came from his set of friends who persuaded him that he would make an excellent teacher. Based on these supportive statements he applied for College and was accepted. The beliefs of others in his ability to become an excellent teacher provides him from time to time with the boost that he needs, particularly as in other areas such as his beliefs in his written and reading skills tend sometimes to be rather low. He revealed that he found the academic situation daunting and sometimes even threatening but that perseverance and the desire to teach would be the driving force which would he hoped ultimately lead to success. Iwa is still plagued by his performance in past school experiences. He is married and has four school - aged children.

Rima

Rima (high cultural self-efficacy) rated peers, teachers and parents four, but rated confidence and being relaxed low. Rima had come from one of the Māori secondary colleges having completed her seventh form year. Her highest school qualification is Sixth Form Certificate. Having very supportive grandparents, is a key reason for her success, she explained that they provide emotional, social, cultural, and educational assistance when needed, as well as a stable home environment.

Rima perceived trying hard as being a high factor in explaining her academic success. She does not consider academic work easy and stated that working hard is the main reason for her success. She blamed the work being too hard for her lack of success. While at secondary school she changed schools which she explained was at a crucial time. This fact, she thought, contributed to failure in some subjects. She is not overly confident in the academic setting and has taken a while to settle in to the college environment. She feels particularly vulnerable when having to speak in front of the class and generally tries to avoid it. She aims to achieve as well as possible in Māori Studies but does not feel as capable in other subject areas. She did not give any particular reason for becoming a teacher.

Waru

Waru (low cultural self-efficacy) rated peers low, but rated parents, teachers and his personal confidence high. Waru left school with Sixth Form Certificate but had been away from the school situation for a number of years, although he had been involved in course work over the years. On the whole, he felt quite capable within an academic context and it seemed the least of his worries. His memories of teachers were that they were generally helpful. He did not dwell too much on his

past school performances or environment or its associated influences. He mentioned, however, that his father had made some key decisions in the courses he took and what he wanted to do. Waru was not able to pinpoint exactly the key factors that contributed to his academic success, although his success with facts and figures meant that this participant felt comfortable with most academic tasks. He commented that not trying hard enough was probably the single biggest factor if success was not achieved. Overall he seemed quite positive about his academic capabilities.

He remembered one over-riding stipulation as a child about what subjects he was to take and that was his non-involvement in anything Māori. He had long wanted to become a teacher but circumstances had meant he had not been able to fulfil this until now. He is married and has five children of ages ranging from 3-13.

Summary of interview participants

Two of the interviewees are male and two female. The two female have come straight from school to College and the two males have been out of school for a number of years. Their backgrounds are indicative of a range of schooling and family experiences. Family support varied but is highly influential in all their present circumstances. They proferred various reasons for their past accomplishments ranging from their interests, effort and ability. Both Iwa and Rima expressed a lack of confidence and were a little doubtful in the academic environment.

Cultural considerations for learning

The final section contained open-ended questions, and participants were asked to comment about what they perceived was necessary for them to succeed while at the College of Education. This question was answered similarly by most participants. Overall, important perceptions included having high levels of personal motivation, developing good study habits, interacting in both Māori and Pākehā contexts successfully, having good lecturers and continuing whānau support. One participant wrote that it was absolutely essential the institution ensured that they be allowed to flourish both as a Māori and as a student teacher. Simply put, participants felt that while it was important to learn about becoming a teacher from a general education perspective, it was just as important to learn about Māori and Māori teaching perspectives. They did not feel that both were necessarily the same either.

Summary of academic self-efficacy results

In general, the participants who had higher formal school qualifications were more confident in the academic context; those student teachers with fewer or no formal school qualifications had a lesser degree of confidence. The mature student teachers were more likely not to hold formal school qualifications. High kaupapa-based whānau support was evident in the academic context. Group work and collegiality provided a boost to their confidence levels. Low levels of individual and independent work habits were recorded, as well as fairly low levels of high achievement aspirations.

Cultural self-efficacy

The second part of this study is concerned with these student teachers' cultural self-efficacy. The results for the overall cultural self-efficacy are reported first, followed by the findings as they related to the studies framework. The items shown in Table 13 were selected from the questionnaire to determine the overall cultural self-efficacy indicators of survey participants as well as to select the two interview participants.

Table 13. *Cultural self-efficacy items from the questionnaire*

1.	How confident do your feel about your ability to speak Māori? (item #20)
2.	Do you feel strongly influenced by Māori ways of doing things? (item # 25)
3.	Do you feel confident in a mainly Māori situation? (item # 26)
4.	Does your whānau support you culturally? (item # 10g)
5.	Do you feel your learning is enhanced when working with others? (item # 39)
6.	Is karakia important in a Māori learning environment? (item # 47)

Cultural self-efficacy: Survey participant results

Table 14 shows the spread of responses to the cultural self-efficacy indicators from the survey participants. Consistent with earlier findings, all participants felt that their learning was enhanced when working with others, with 63.5% (n = 15) rating either a 3 or 4. The cultural aspects they generally answered fairly highly.

However, when it came to feeling confident in Te Reo and Tikanga, ratings were reversed to low ratings. This suggests that these participants lack access to cultural activities such as speaking Māori and being involved in cultural activities. The questions were not detailed enough to provide conclusive evidence of this, however. Overwhelmingly, participants rate karakia as being extremely important in a Māori learning environment. Participants saw karakia as an important aspect of being Māori although not all were able to articulate how or even why. Regardless, karakia was unanimously supported by the whole group, a dimension many recognised as being linked to their spiritual selves. Most of the participants rated being influenced by Māori ways of doing things either a three or four rating, their whānau most also credited with supporting their cultural development.

Table 14. *Cultural self-efficacy responses from the survey participants*

Items	Survey participant rating			
	1 (not at all)	2 (a little)	3 (a lot)	4 (extremely)
karakia (#47)	0	1	3	20
tikanga influence (#25)	0	3	14	7
whānau influences (#10g)	1	5	2	16
working with others (#39)	0	9	7	8
tikanga confidence (#26)	2	11	8	3
te reo confidence (#20)	2	16	5	1

Sources of cultural self-efficacy

The following comments of the sources of cultural self-efficacy are conclusions drawn from the survey and interview data.

Past performance accomplishment

Performance accomplishment in Te Ao Māori is not tested in the way that it is in Te Ao Whānui, therefore it was not attempted within the confines of this study. To do so may be inappropriate.

Vicarious experiences

As a generation who have lived mainly away from their tūrangawaewae many have not been exposed to competent cultural models on a regular basis, therefore the luxury of having similar models on which to base their experiences was limited.

Verbal persuasion

While they receive much verbal support, having to be continually involved in switching between Māori and non-Māori situations means that they have little enough time to develop this source.

Emotional arousal

The emotional arousal levels of these student teachers are considerably high. On the whole they lack linguistic and cultural competencies and so feel particularly threatened in some situations. Mature student teachers are more likely to be more anxious, express doubt about their capabilities and lack confidence in a cultural setting.

He Huarahi Ako framework

The following sections provide details about participants' cultural aspirations and perceptions which are proposed as being importantly related to forming these student teachers' cultural self-efficacy.

Pou Tuatahi: #Te Reo Māori

one day I would like to speak in my own native tongue fluently
(survey response)

Te Reo Māori was seen overwhelmingly as a key to participants entry into their Māori world, not only for professional gain but more importantly, for personal gain. Only three (12.5%) of the 24 were not taking Māori language courses. All but one, indicated that knowing Te Reo was very important for them as a teacher. The desire to learn Māori was particularly keen. However, some participants, 42% (n=10), indicated that it was an almost impossible task. Among reasons given were that there is not enough exposure to it , they could not practise it often enough, and that two hours a week for their Māori language course was not sufficient time to learn effectively.

Many (42%; n = 10) also felt their ability to learn Māori was limited, and (75%; n = 18) had little or no confidence in their ability to speak Māori. An even greater

number (92%; n = 22) indicated they had little or no competence in speaking Māori. Not surprisingly then (75%; n = 18) seldom used Māori. An overwhelming, (96%; n = 23) indicated, however, that it was 'very important' or 'extremely important' for them to be able to speak Māori.

In summary, participants saw Te Reo Māori as being an essential part of their lives not only in terms of career but also for personal and cultural reasons. Confidence and competence levels however, were extremely low and overcoming this was a daily battle for some.

Pou Tuarua: #Tikanga Māori

Part of being Māori is understanding your cultural self.

(survey response)

Generally, participants felt Tikanga governed their way of life to some extent, particularly in the way they saw themselves and who they were. Most were exposed in various forms to Māori ways of doing things, which included events such as tangihanga, whānau and hapū hui, which included a range of celebrations. Participants generally saw Tikanga Māori as knowing how to act appropriately when in a Māori situation. Six responses indicated that they were not taught these practices but learned them as a consequence of being around, not only at the marae but also watching the way in which their whānau operated at home and with relations. Iwa explained learning Tikanga like this:

> I learnt aspects of Tikanga because everyone else was doing it, it was just part of being a family. My nanny and my aunty lead the way in our family. We weren't told why we do things in particular ways we just do it because that is how it is done. I have not been taught systematically...I have learnt a lot of Tikanga without Te Reo, but by observation.

Being actively involved in Māori activities and strongly influenced by Māori ways of doing things was rated very highly by all of the participants. However, over half the responses (54%; n = 13) reported not feeling very confident in a mainly Māori situation, such as on the marae. All participants felt that learning aspects of Māori culture for both their personal and professional lives was absolutely essential.

Other responses indicated that low participation in marae events was mainly due to not living close to their marae. Another said that "not living close to my marae

means some of the customary practices are a little lost to me, so I would welcome the chance in the future to attend wananga at my home marae". Another noted that Te Kupenga o te Mātauranga could provide an opportunity to learn Tikanga, "but at the end of the day some Tikanga is best learnt on your own marae". Despite not all participants being actively involved in marae activities, some responses indicated that participants felt that the opportunity for cultural encounters occurred in other places, such as church, Kōhanga Reo, and sports clubs.

Pou Tuatoru: #Kaupapa Māori

I relaxed more upon discovering that I had a Māori tutor and the Māori language and customs were to be incorporated into our study..I know I need to firstly awaken to the Māori in me if I am going to be of any value to my future students

(survey response)

Kaupapa Māori was articulated by the participants in a number of ways. There were several occurring themes that were espoused. The first related to those participants' values and attitudes that they saw as being inherently Māori, such as "belonging and knowing ones' roots or whakapapa". There appeared to be an overwhelming response to the whakapapa issue, as 62.5% (n = 15) of the responses indicated that Kaupapa Māori was related to issues of belonging and being connected to each other through whakapapa. This, in turn, meant they were part of a Whānau group. In other words, they saw being Māori not only as having cultural implications but as having social and political ones as well. One participant described it like this, "I'm a Māori struggling to come to terms with the harsh realities of Te Aohurihuri. Being Māori affects me greatly". Another said "I am 23 years of age, and it has taken me this long to realise the importance of my people and my Tikanga."

Participants referred to feelings of kinship and sharing similar ideas and ideals with other Māori when learning in a Māori situation. Contributing to the Māori children's development they indicated was important but they were not sure about how much knowledge they themselves had to contribute. Other common responses about kaupapa Māori included a strong sense of group unity, and expressions of aroha and support for each other (62.5%; n = 15). To learn and act in a way that expressed Kaupapa Māori was supported by over three quarters (75%; n = 18) of the group. Being at the beginning of their teacher education it was felt that they were a little unsure of what it entailed (all interview responses). One participant (Iwa) likened this journey of "Kaupapa Māori" as being on a "spiritual walk."

Pou Tuawha: #Ako

I have participated in the Pākehā education system, yet I still have characteristics which are inherently Māori. I am an observer, I prefer hands on and I have difficulty with theory

(survey response)

Most participants generally felt that they had the ability to learn required cultural tasks (83%; n=20), although to a certain extent it was a situation where most felt uneasy and had high levels of anxiety and lacked confidence. In terms of learning and teaching methods, there was a general feeling amongst participants that modelling, imitating, observing, and tuakana/teina learning/teaching methods were favoured. A common comment (54 %; n = 13) was that there are some tasks which can only be learned in a particular way. For example, the best way to learn waiata, karanga and whaikōrero was to observe and participate and that it would be most inappropriate to teach it in a lecture (25%; n=6).

An accepted practice amongst the group (83%; n = 20) was teaching and learning from each other . It not only gave them skills in teaching but it also recognised sharing skills as being important. Implicit in this model is the view that students do not come to college as empty vessels with little or no knowledge to contribute. This is important considering that at least half (54%; n = 13) of this sample group are over 28 years of age, with varying prior work and life experiences.

The male participants, in particular, were able to indicate how their learning in language was going, especially in formal speech making. Practice, and plenty of it, was recognised as being important. Classroom and real situations when visitors arrived helped give student teachers a developing sense of achievement. One participant said that "it seems to get easier each time and that hopefully by the time we have completed college that we would be adequately equipped to cope with the cultural demands that would undoubtedly come our way."

Another common response was the call for more mentors# - that is, someone from whom they could receive good advice, good support and good nudging if necessary (33%; n=8). Student teachers had to rely on each other for this at times, which frequently meant the blind leading the blind. They felt that there were as yet too few good Māori role models at college. Having good role models was also seen to be an important aspect of their learning, not only from senior student teachers (16%; n

= 4) but also from lecturers. Māori lecturers (25%; n = 6) were important role models not only for helping them to aspire to higher levels of teaching but also because they were seen as continually feeding them with culturally relevant learning and practices, regardless of whether they were in a Māori kaupapa class or not. This meant that they did not have to learn everything from a euro-centric base, but rather could learn it from a Māori-centric base. Some (8%; n = 2) felt that this helped them re-think some of the misconceptions they had about themselves as learners. As a result, some (87.5%; n = 21) felt that they had learned a whole lot of new things about themselves, even in the brief time that they had been at the College of Education.

Access to good information was also considered very important (29%; n = 7). However, participants generally felt uneasy asking questions. They noted that lecturers across departments had encouraged them to ask questions and to seek help if necessary (12.5%; n = 3). Some responses, however, indicated that this meant quite a change of mindset (25%; n = 6). Several (33%; n = 8) mentioned feeling whakamā or embarrassed about having to ask questions, especially if they were "dumb questions", while others (12.5%; n = 3) said that they had never been encouraged to ask questions.

Whanaungatanga within the learning environment was considered extremely important by student teachers (83%; n =20), not only for their intellectual development but also for their emotional and cultural well-being. Such a concept meant that they could get on with the learning process and not be burdened by feelings of unease. One participant said that "classes should be run like a family and that way we get a chance to be with those who are in a similar situation and are automatically accepted regardless of our intelligence levels. Learning as a whānau group also allows us more opportunity for more Māori input in to the way we learn; more Te Reo; more Tikanga Māori, and more Māori cultural support." Learning in Māori ways was defined by this participant who said: "it can help people like myself who find it hard trying to fit in to this Pākehā institution, by not having to leave my Māori side behind."

From the responses, it is reasonable to suggest that Māori student teachers see themselves as having different needs as articulated in some of the written responses "that Maori walk a different path, not so as to be divisive amongst ourselves and other New Zealanders, and not to create tension, but to strengthen ourselves as Māori". Another response indicated, however, that they also have individual needs,

"this system should realise that we are all individuals and learn at different rates and in different ways". These two comments express the right to be considered different as a group separate from non-Māori students, but also want it to be recognised that there are differences which exist between the Māori students themselves.

Te Papa: #Whānau

Kia ū ki tōu kāwai tupuna, kia mātauria ai, i ahu mai koe i hea, e anga ana koe ki hea

Trace your ancestral stem, so that it may be known where you come from and in which direction you are going.

(from the writings of Rev. Māori Marsden)

When discussing whānau, participants talked mainly across three and four generations. All participants, to some degree, were active members of their whānau, with most deciding that whānau not only included their biological family but could be extended to groups of people who were involved in similar pursuits including leisure or work. The concept of whānau amongst the group was highly valued, and all saw themselves as being part of the Te Kupenga o te Mātauranga whānau.

In discussing the role of whānau in their own development, participants referred mainly to biological whānau members, which included grandparents, uncles and aunties. Whānau continued to influence participants' decisions (92%; n = 22) and all (100%; n = 24) indicated how they were a constant source of support while at college. In all cases, just knowing that they were there was enough support. However, having a supportive whānau also meant reciprocating the support: they were committed to supporting whānau when called on even when it impacted on College of Education commitments.

In discussing whānau commitments, all participants reported that this meant being actively involved in activities such as weddings, birthdays, tangihanga, christenings, meetings, unveilings, and other related hui. Within the last three months, all participants had attended one or more of these occasions. Some were even more involved with organising whānau events (16%; n = 4). On the whole, the younger student teachers seemed to be less involved in wider whānau events than the older students. Having children brought yet another dimension to whānau (14 of the 24 participants have children) not only in the sense of having to be the support for

children, but also juggling responsibilities to other whānau to which they belonged such as Kōhanga Reo and schools.

The concept of whānau seemed to be transferred to the College of Education situation, whereby working and learning together was a much accepted practice. There was a general feeling (92%; n = 22) that being a part of this group was uplifting most times and offered them a source of support and confidence in otherwise demanding and sometimes uncompromising situations. Learning with students who were from similar backgrounds further enhanced learning, not only because they were mainly Māori, but also because many of them were older with similar life experiences (42%; n = 10). In addition, most (92%; n = 22) felt an unsatiable appetite for learning about their culture. In fact, most (92%; n = 22) stated that being at the College of Education would help them on their journey toward getting to know about themselves, not only educationally but culturally as well. These two points were emphasised by nearly all participants. The vehicle to which participants saw this happening was learning in a whānau-type situation using Te Reo, and being based on a marae.

Te Tāhuhu: #Wairua

Wairua in this study relates to wairua Māori, and maintains the assumption that this can sustain a person to fulfil important life pathways. Wairua is undeniably present within this sample group although in most cases seemingly untapped. The wairua, or inner soul, dimension is intricately interwoven with all aspects of the participants' lives. Extracting the inner essence of people is neither entirely possible nor wise. However, some indicators of wairua Māori are presented merely as illustrations of how wairua was displayed with the group of participants even when there were less than strong efficacy beliefs about cultural well-being.

When discussing wairua and achievement in Te Ao Māori, one participant said: "I always think of Nan who passed away two years ago." Another said, "My great grandfather told me before he died - you have a gift from your ancestors, use it well. You have the ability". Another said that they saw and were guided by their grandfather who had passed on. Wairua, as a source, came mostly from home, tūpuna, grandparents and the feeling of belonging. For some (12.5%; n=3) wairua helped students to decide what activities they would engage in, although many (75%; n =18) felt that their past educational experiences meant that they had not really yet had the opportunity to develop this side of their being. Thus, a key motivating factor for participants was finding a starting base which most (83%; n =

20) felt had something to do with Te Reo, Tikanga and Kaupapa Māori. There was a sense amongst the participants that without these three essential ingredients, a part of their existence and potential would lay dormant, and in some ways, therefore affected, their wairua (66%; n=16). This was illustrated in the sentiments expressed a by student teacher that 'not having knowledge of one's own language and culture is quite debilitating as one cannot participate fully'. Some (8%; n =2) believed that only when they had developed competence would they begin to feel the inner depth of wairua and its full meaning. While most (83%; n =20) of the participants felt that they had a long way to going to achieve knowledge in Te Ao Māori, this was mediated by strong cultural aspirations which, in turn, would ultimately mean a better inner balance.

Karakia was generally (33%; n = 8) considered to be related to wairua with some (8%; n = 2) commenting that they were still coming to grips with it all. Nevertheless, it was considered to be extremely important by 96% (n = 23) of the participants, particularly in learning environments both Māori and non-Māori.

The marae as a learning institution

Te Kupenga, symbol of hope and achievement

(survey response)

Primarily participants see the marae as a physical and spiritual place where the culture is practised and protected. The participants saw the marae as having a very strong identity within the college not only in reference to its physical presence but also to its social and spiritual presence. Student teachers noted feeling a sense of protection and validation through having a place which was undeniably theirs within the larger institution. They welcomed the opportunity to "whakarongo ki Te Reo Māori" (listen to Māori), as well the social and cultural activities which they felt helped make them feel part of the place. The sentiments expressed that Te Kupenga offered them "a place to learn the very basics of Maoridom; and a place to encourage what you are".

Other sentiments included such phrases as 'it offers a place of Whanau Māori, Whānau tautoko, and Whānau āwhina'. Another wrote 'it is the best learning environment I have ever had'. In terms of learning marae protocols, most felt that the marae was the most appropriate place (71%; n = 17). They were reasonably at ease on Te Kupenga where they felt they could observe the rituals fairly comfortably, and safely. All the interview participants mentioned not having been

brought up on the marae and so not being privy to the large amount of learning that occurs as a consequence of being immersed in marae protocol. Te Kupenga, therefore, is considered by all but one of the student teachers to offer them important opportunities to learn Te Reo, Tikanga and Kaupapa Māori.

In summary, Te Kupenga offered participants a place of warmth, and gave them a sense of belonging within the larger University environment. Not only was support provided by the physical and wairua being of the marae but they acknowledged also the staff of Te Kupenga. Being a whānau member of Te Kupenga provides student teachers with the type of support they see as being important for their success. Being at Te Kupenga has enabled the group to develop a sense of whānau where support for each other in social, cultural, academic, and emotional aspects is very high.

Cultural self-efficacy: Interview participants

Both Rima and Waru were selected on the basis of their responses to these survey items - Rima as an example of someone exhibiting high cultural self-efficacy, and Waru exhibiting low cultural self-efficacy.

Rima

Rima (high cultural self-efficacy) was more or less brought up by her grandparents who lived not far from her grandmother's marae which they frequented often. Both grandparents speak Māori although it was not the language she had been exposed to. Rima is very confident in a marae situation as she was brought up going to the marae with her grandparents. Attending a Māori girls boarding school had helped develop in her a desire to learn her language and culture, and she has been learning Māori since Third Form. Despite her background, she admitted that she was still lacking in confidence in a Māori speaking situation.

Table 15. *Cultural self-efficacy responses from the interview participants*

Items	Interview participant rating			
	Rua	Iwa	Rima	Waru
	1 (not at all)	2 (a little)	3 (a lot)	4 (extremely)
karakia:wairua	4	3	4	4
tikanga influences	4	3	4	3
whānau influences	4	3	4	2
working with others	2	4	3	4
te reo confidence	2	2	3	2
tikanga confidence	3	2	4	1
Total	19	17	22	16

Waru

Waru (low cultural self-efficacy) talked about feelings of unease due to lack of cultural support from his immediate whānau. He described his upbringing as being totally divorced from Māori. Hence, they did not often visit their marae. This, he lamented, was a continuing source of despair, so much so that it was having a major impact on his current cultural development. He felt in most instances like a fish completely out of water in the marae situation, feeling very uncomfortable and avoiding the situation if possible. He finds speaking Māori in public extremely threatening and responds with difficulty. He talked about the influences that his grandfather had on his father and how generally that same sort of influence was passed on to him: that in essence Māori was not going to be of use to him in the future. He felt that this attitude still shaped how he felt, although he was trying to battle with it as he wanted to learn his cultural heritage.

Rua

Rua (high academic self-efficacy) had learned Māori at secondary school and was continuing to learn it. She had been brought up in a rural farming community not far from her father's marae. While they did not often go to their marae she felt

reasonably comfortable there. One set of grandparents were Māori and her grandfather spoke Māori, although she did not recall him using it often. Her father could not speak Māori, but her aunties were quite fluent and had helped her learn Te Reo. While she lacked confidence in some aspects of Māori she was nevertheless keen to learn.

Iwa

Iwa (low academic self-efficacy) was brought up in an urban setting away from his cultural roots. He recalls regular annual family visits to their grandparents and family marae while they were growing up, and this was how contact was maintained. On his father's side, both his grandparents could speak Māori. His grandfather, however, did not speak to his children in Māori as he had been prohibited and punished for speaking it and so did not want his children to have to suffer the same fate. Iwa is keen to learn Māori but gets a little frustrated with what he describes as minimum learning time for Te Reo. He feels confident enough to be in a total immersion situation even though he says he would miss a lot of what was being said. He felt sure that after a while, however, he would begin to pick up on what was being said.

Summary of interview responses

While all participants could recite their Iwi and Hapū affiliations, three had little to do with maintaining these links, although these links were kept alive mainly by their parents and or grandparents. All, but one, from an early age had heard Māori being spoken, although not often. Māori was spoken or understood by at least one of the grandparents of each of the interview participants, but not actively passed on. Three of the four interviewees explained that their grandparents' concern was that their children learn how to get on in Pākehā education. All of the interview participants had only one parent who was Māori. Iwa and Waru, had been out of school for nearly twenty years, had not taken Māori at school, and so were both just starting to learn Māori. Learning to speak Māori posed some difficulties, ranging from less than supportive past personal experiences, having to learn different language structures, and the overwhelming sense of lack of knowledge.

Summary of chapter

This chapter has reported the results of the survey, interviews and researcher observations. Overall, it was found that student teachers who had higher formal school qualifications, reported high motivation levels, supportive parents, good teachers and schools, used a range of learning strategies, deliberately planned for

learning, had a developing sense of Māori knowledge, lower anxiety levels, and were apt to achieve higher levels in an academic setting. The student teachers' cultural self-efficacy indicated other factors in the development of their self-efficacy. On the whole, student teachers who had access to marae, and to Māori speakers, had regular interaction with their wider whānau, were supported culturally by whānau and had learnt Māori at school, tended to be more confident in a Māori situation. Few of these student teachers, however, claimed to have all the above experiences.

Finally, this chapter started with a waiata which was written for student teachers of Te Kupenga o te Mātauranga. It is most appropriately sung for visitors to Te Kupenga. It is a song of greeting to visitors, and welcomes them in the knowledge that they will be cared for and nurtured within the warmth of the bosom of the treasured house Te Kupenga. It is a song written for the generation of students to come and reminds them that the house is supported by their commitment too.

CHAPTER FIVE

Te Kupenga o te Mātauranga
Me tū hei turangawaewae
kotahitanga, whanaungatanga e
Tūhura kauwhau, aho tūpuna
Tū tangata Māori e.
(nā Ataneta Paewai i tito, tau 1994)

DISCUSSION and CONCLUSION

The literature claims that self-efficacy for learning depends on a range of factors such as prior experiences, personal attributes, and environmental social supports (Schunk, 1996). Understanding the factors that affect the self-efficacy of Māori student teachers is important not only from a Māori development perspective but also from Teacher Education perspective. This is especially significant in that group achievements and social change are said to be rooted in self-efficacy (Bandura, 1995). This chapter discusses the findings of this present study about the factors that affect the academic self-efficacy and cultural self-efficacy of Māori student teachers.

Characteristics of Māori student teachers

Statistics from recent years show that high numbers of Māori students at Massey University are generally older, tend to have fewer formal school qualifications, and are more likely to have children and to come from the work force (*Māori learning support annual report;* 1996) . These statistics indicate that these student teachers can be classed as non-traditional student teachers. Non-traditional university students have been described as females, ethnic minorities, the disabled, the economically disadvantaged, adult students and students with below average GPAs or (Grade point averages) (Arlken, 1981; Cohen & Brauer, 1982; Jones & Watson, 1990). This sample group are similarly characterised by some of the above descriptions. An increasing trend over recent years has been the rise in the number of mature student teachers entering teacher education programmes. They are selected on the basis of prior work experience, suitability for and to teaching and commitment to teaching rather than on their school academic qualifications. The sample group involved in the present study reflects some of these characteristics.

It has been possible to identify some factors which either boost or decrease these student teachers' academic self-efficacy. In a sense, their acceptance into the teacher education programme serves to boost their self-efficacy and initially at least, most of the sample group see themselves as capable participants in the programme. However, few of these student teachers exhibited a stable high academic self-efficacy; it fluctuated according to the circumstances (such as the type of assignment, the teacher, and the type of teaching methods that are employed). It was found that these student teacher's self-efficacy could be advanced by developing their collective efficacy within an academic context. This factor was in cultural congruence with this sample group seen in the development of collective efforts in assignment tasks and the continuation of self-selected whānau groups. There are a range of factors believed to affect the academic self-efficacy of Māori student teachers: some enhance self-efficacy, whereas other factors are likely to weaken it.

Sources of academic self-efficacy

Past performance accomplishments

Those student teachers who entered the teacher preparation programme with formal school qualifications by and large exhibited higher levels of confidence in the academic context than those who did not. These findings confirm Bandura's (1986) claim that past performance is the most influential source of assessing self-efficacy. Within this sample group only three held Bursary qualifications. Lack of a proven academic track record (such as Bursary) impacted on the other student teachers' levels of anxiety and stress and created a feeling of inadequacy about completing assignments to the level required of them. Past performance accomplishment was problematic in that most of the participants had no current information by which to judge their capabilities within the academic setting. It is important therefore, at least in the initial stages of College, to provide these student teachers with a greater level of assistance and support than presently exists to ensure that they achieve some early success.

Vicarious experiences

Seeing other student teachers who are perceived to be similar to themselves achieving academic success does have the potential to raise levels of self-efficacy (Oettingen, 1995). Māori student teachers might be considered to be

overwhelmingly influenced by this source as they tend to base comparisons on factors such as their ethnicity, their age, having similar interests, and their social and cultural contact. Being members of the same ethnic minority group may in fact strengthen this source considerably. To illustrate this point, two survey participants said: "we stick together, we have similar ideals, similar interests and goals". This response was indicative of the view held by most of the participants. This high level of considered similarity, therefore, tends to heighten their level of self-efficacy, both in and out of classes. This intensity of group identification is particularly strong for this group and, as such, vicarious experiences is a significant source amongst group members, given the amount of time they spend together and how they see themselves in comparison with each other (Schunk,1989). However, when they are not in whānau classes they do not have access to this source of self-efficacy (vicarious experiences) and are therefore at risk of lower self-efficacy (Goulton-Fitzgerald & Christensen, 1996). Providing these student teachers with teina and tuakana teaching opportunities (similar to peer tutoring), inter-year group interaction (John Tapiata, 1980) (which would increase role modelling opportunities), has the potential therefore to increase these student teachers' self-efficacy.

Verbal persuasion

Verbal persuasion is another key source of student teachers' self-efficacy. Whānau, teachers and peers appear to provide a reasonably high level of encouragement and support. This source of self-efficacy increased further upon acceptance into the College of Education programme, as lecturers, associate teachers, the college whānau group, Māori teachers and educators, Iwi, and community persons added to the range of people who offer them encouragement and support. This high level of verbal persuasion is perhaps further fuelled by the political call to increase the numbers of Māori teachers across the education spectrum. In short, verbal persuasion contributes hugely to these student teachers' academic self-efficacy.

The fact that this group spends a lot of time together, not only in self-selected class groupings, Selected Studies groupings, but also in social groups means that they also effectively increase this source of self-efficacy. They do this by sharing their personal performances, and personal stories. Feedback from college work is often shared amongst the group, which means the potential for praise and encouragement is quite high. Even those whose marks are low or who need to repeat work, are given positive encouragement. As the semester progressed, positive feedback from lecturers and whānau increased these student teachers' self-efficacy levels. This

source, like vicarious experiences, is also considered to be a strong source of self-efficacy.

Emotional arousal

The data related to this source of self-efficacy was somewhat conflicting in that responses indicated these student teachers were generally relaxed within the academic environment but had high levels of stress and anxiety. This was the source of self-efficacy that tended to fluctuate the most. A suggested reason may be that self-efficacy is sometimes inflated sometimes by their collective efficacy and, when left to perform on their own, as in test situations or independent study they may feel less self-efficacious. Some student teachers found the academic situation to be potentially threatening. Several reasons were given for this including their perceived lack of study skills and strategies to manage course tasks; not understanding what was required of them and perhaps a difference between their expectations and their lecturer's expectations; and what some explained as the high level of reading and written skills required. It was difficult to pinpoint reasons for high anxiety levels among the group but one can speculate that lack of recent performance accomplishment may be one reason. Waru (interview participant) highlights the complex nature of anxiety saying that his anxiety comes from several sources: i) his desire for personal achievement and to do well; ii) his desire to do well for lecturers; iii) his attempts to meet his family's expectations of him. This high level of anxiety appeared to reduce as these student teachers gained experience in the academic setting however. As such, learning support and learning strategies early in their teacher education programme may alleviate feelings of anxiety and lack of confidence and hence increase their self-efficacy.

From the evidence there appears to be an imbalance in the strength gained from each of the four sources which influence self-efficacy. These student teachers' past performance accomplishments and emotional arousal sources were considerably weaker as influential sources than their verbal persuasion and vicarious experiences. The scope of this study did not include the differential influence of these sources on self-efficacy however. Furthermore, Māori student teachers' arousal state may be affected not only by their perceived lack of skills but also by self-perceptions about their ethnicity. For example, some Māori student teachers perceived a difference between their own and the institution's values, and the manifestation of those values in the way the institution operates.

Collective efficacy

The collective and essentially non-individualistic nature of Māori society (Walker, 1990) is portrayed by this group of student teachers. This collective nature of operating was evident in these student teachers interactions and sharing of resources. In a sense, they had transferred their collective cultural actions and responsibility towards each other (Patterson, 1992) to another cultural context, in this case to this studies academic context. They openly displayed their preferences for working together, and for working towards group benefit (Hofstede, 1980). While they were in the academic situation they were primarily required to work in a predominantly individual way (such as doing individual assignment work and independent study). Yet, they essentially maintained some collective characteristics such as forming study groups and assisting each other. Being members of a minority group amongst a dominant group within a university environment is also proffered as another reason why they might collude. Collective views are promoted in an academic situation by accepting group work and personal experiences as valid learning experiences which in turn validate learning preferences and support these student teachers' development of collective efficacy. However, within this academic context collective efficacy is undermined when student teachers are required to submit assignment work individually. It was found that developing the collective efficacy of these student teachers may be an important step toward developing and strengthening their personal self-efficacy within an academic context.

A whānau group

Collective efficacy and whānau are closely related. Within the academic context, both whakapapa-based whānau (common source of descent) and kaupapa-based whānau (non-customary cohesive Māori interests) contribute to the development of these student teachers' self-efficacy. Not only do whakapapa-based whānau play an important role in providing some financial, cultural, and social support, but they also have a role in providing academic support. This academic support has two levels. First, there is a reciprocal arrangement whereby these student teachers have a sense of responsibility to their whānau to complete the programme in return for the support provided by their whānau, while they are studying. This high degree of commitment to whānau aspirations has the potential to compel student teachers to persist, even if sometimes they feel less than capable of remaining in the programme. One of the survey participants who left in semester two had caused considerable disappointment to his whānau by leaving the programme part way through.

Kaupapa-based whānau

Māori student teachers tend to gravitate towards a whānau grouping not long after starting at the College of Education, influenced by choices of subject studies, and other aspects such as ethnicity, age and interests. The following survey response is indicative of the overall view held by many of these student teachers: "We are all prepared to help each other. We look after each other. We have strong ties; we are close and we are whānau".

Aspects of whakapapa whānau, such as identity and similar background, are transferred to kaupapa-based whānau which are used within the learning environment to enhance their learning. Iwa's view is a view commonly held by the group:

> The whānau group is a family group, where people can come together and chew ideas over; it is really good, it is one big clique...we get together, talk about the same things; it is a fun group and we all have the same opinion, how am I going to get through this. There is a lot of unity and camaraderie. Most of the students are over 30, and in the same boat....Measuring yourself up academically with others in the class never occurs to us to do, I feel really comfortable in the class, totally relaxed and accepted (Iwa).

Another view about whānau classes expressed the concept of teina and tuakana.

> I was shocked to have people older than me in my class, I am used to it now. Some good friends are older than me. Age is not really a big thing any more. We are all doing the same thing. I quite enjoy working with adult students. The variety is good and you just get a bigger variety of experiences and so your knowledge just increases so much more. I found it a bit hard helping older students especially as I thought I knew very little. But I help where I can, and they appreciate the help (Rua).

The concept of whānau allows student teachers to consider learning across age ranges and experiences, as in teina and tuakana relationships. Regardless of the level of commitment to the whānau, there are expectations placed on student teachers by their whakapapa-based whānau or kaupapa-based whānau to be involved in cultural activities. Both whakapapa-based whānau and kaupapa-based whānau are important in these student teachers' development. Therefore, it is

essential that the kaupapa-based whānau of this College of Education, as articulated by student teachers, be allowed to continue and flourish (Goulton-Fitzgerald & Christensen, 1996).

Other related contributing factors to Māori student teachers' self-efficacy

Self-efficacy beliefs are correlated with other self-beliefs, motivation constructs, and academic choices, changes, and achievement (Pajares, 1996). Māori cultural values play a significant role in determining these student teachers' self-efficacy. The following sections discuss some of these findings.

Attribution

These student teachers are more inclined to hold an internal locus of control as opposed to an external locus of control. They perceive success and failure as more related to their effort and ability as opposed to luck and task difficulty. High self-efficacious students tend to attribute failure to insufficient effort, whereas low self-efficacious students attribute it to low ability (Collins, 1982; Silver, Mitchell & Gist, 1989). The findings in this study did not support this view. Student teachers who display relatively low levels of self-efficacy generally attributed their failure to achieve higher marks to low effort. In most, if not all cases these student teachers felt they had the ability to achieve better. One could speculate that these student teachers' levels of self-efficacy is boosted by their collective efficacy and the affirmation of being accepted into the programme. On the other hand, their ability to judge their capabilities accurately within an academic context may be less accurate.

Bandura's (1982b) suggested reasons why students may not work hard on tasks, may have relevancy for this sample group. He claimed that:

- students do not expect competent performances to produce results (negative outcome expectation);
- students who believe hard work earns a high grade will not work hard if they doubt their capability to do so (low self-efficacy);
- too much effort with poor results implies limited ability (Bandura, 1989).

Brophy (1988) claimed that students decide beforehand how much time and effort they want to expend on a task and this will depend on their beliefs about their capabilities. A key to such a judgement lies in their past experiences. The lower levels of effort expenditure may be explained by the observation that many of these student teachers had little knowledge of their recent performance accomplishments.

It is clear the level of effort within the academic context by these student teachers needs to increase. This is more likely to succeed however, in conjunction with learning strategies and skills taught to the students, improved learning support, as well as a mentor guidance system set in place.

Planning, aspirations and achievement

Findings on how much these student teachers planned to complete their academic tasks related to the number of hours they claimed to work outside College teaching hours. If out-of-class time involves reading, researching, writing, assignment preparation, planning, class preparation, etc...based on the small amount of time spent means they cannot be expected to cover all the above suggestions. At the speculative level, reasons for this may be: if a person holds low self-efficacy they are likely to retreat and not persevere at tasks, and therefore expend less effort; or they are simply putting in too little time, which may not be related to self-efficacy at all but to strategy use and other outside college commitments. While they generally felt confident and felt they had the ability, many claimed they did not have the necessary skills to reach higher levels of achievement. These skills, they thought, were reading, and writing and time management. While willingness to study is paramount, it is also, essential to know what to do and to have the skills to carry out the tasks. Clearly, then the institution has a responsibility to these student teacher to ensure they receive quality support in these areas to succeed within the programme.

Strategies

As mentioned previously, indications from the data suggest that there are some strategies that this particular group of student teachers lack. In several questions they were asked to explain what they did in order to complete the tasks. Based on what they wrote, there were some glaring omissions. It may be speculated that many of the student teachers did not fully understand the requirements of assignment tasks. Others lacked clear expectations and courses of action to take. Denial of the heavy reliance that Māori student teachers place on class discussion and on informal study groups forming the basis of their personal research may have contributed to weak strategy formation. Clearly, student teachers did not plan well enough in advance to gather and prepare the necessary information. Such factors are likely to be strong indicators of potential performance success, or otherwise.

Some student teachers admitted that they did not read widely enough, and in many cases it was only the study guides that were accessed for assignment information. As regards reading, many felt that reading was over emphasised and proffered that

long and complicated readings only served to confuse them and developed in them a dislike for reading. Discussion was seen as being a particularly important part of the learning process as they felt that their experiences can contribute to their understanding, which in turn helps them make sense of the information. They also claimed that using a whole range of strategies to teach concepts (for example, teaching a contemporary/ another member of the whānau) and having greater interaction within the learning context to help with assignments is helpful strategy.

Student teacher motivation

The motivating factors for these Māori student teachers are the desire to teach, to achieve well, to meet family expectations and to assist in working for Māori development. McInerney *et al* (1997) called these factors 'multiple goals' and claimed they reflect personal, family, and cultural values. Overall, there is a reasonably high level of motivation amongst the group which helps sustain their interest and pursuit of their qualification, furthermore they claimed that in difficult times high motivation helped them carry on.

Māori pedagogical preferences

Classes that catered for these student teachers' cultural, social, and spiritual needs were considered to provide the kind of supportive environment necessary for their success in learning. Factors such as a relaxed learning environment, personal warmth, encouragement of group work, and how the teacher perceived their cultural background has been claimed to improve learning for minority group students (Dunmont, 1972; Erickson & Mohatt, 1982; King & Wilson, 1987; Ladson-Billings, 1989a; 1989b; 1993; Osborne & Coombs, 1987; Osborne & Sellars, 1987; Wolcott, 1974). The findings of this present study affirm the above statements. In addition the sample group favour a co-operative environment as opposed to a competitive environment, group discussion, and small group tutorials as opposed to large lecture situations.

These student teachers generally claimed that having Māori lecturers made a positive difference to their learning. They claimed that Māori lecturers provided them with role models and mentors they could identify with. They claimed that these lecturers provided them with greater access to Māori perspectives in their learning as well as Māori language and customs (such as karakia) in non-Māori contexts. These student teachers found that having Māori lecturers made the course appear more relevant to them and they felt an instant rapport with the lecturer. They perceived their lecturers as being knowledgeable in their culture, which meant

Māori cultural perspectives were the dominant sources of explanations and examples to illustrate points of learning (Dunmont,1972; Kleinfeld, 1975; Osborne, 1983). In a sense, having a Māori lecturer, increased these student teachers' self-efficacy through vicarious experiences and thus helped them to raise their personal aspirations (Ladson-Billings, 1993). Positive acknowledgment of their ethnicity was therefore an important consideration. Therefore increasing the number of competent Māori lecturers who have the above qualities can help contribute to these student teachers' perceptions of and possibilities for themselves (see, for example, AACTE, 1988; Carnegies, 1986; Eubanks, 1988; Graham, 1987; Merino & Quintar, 1988).

Cultural self-efficacy

Māori student teacher cultural self-efficacy does not appear to be particularly high, and there is evidence to suggest that like academic self-efficacy, cultural self-efficacy also fluctuates. This may be accentuated by the fact that a high number of participants judge their confidence on the basis of their proficiency in Te Reo and Tikanga. While these student teachers exhibit high levels of collective efficacy within the cultural context, their self-efficacy is considerably lower. This study also found that while some cultural aspects have been eroded by the integration and assimilation of Māori into Pākehā culture, some aspects have remained steadfast. Those aspects which appear to have remained steadfast are wairua Māori and the values of a collective culture.

A brief discussion of the four sources of self-efficacy within a Māori cultural context follows. This is followed by a discussion of the findings in relation to a cultural framework, He Huarahi Akō: Pathways to Learning.

Māori student teachers' sources of cultural self-efficacy

Performance accomplishments

These student teachers' performance accomplishment within a Māori context is not measured in the same way as their the performance accomplishments within an academic context. Attempting to proclaim these student teachers accomplishments, therefore, is not only artificial but inappropriate. Furthermore, performance accomplishment is achieved over time, and is measured by appropriate people in the cultural context. Determining cultural performance accomplishment is difficult as these student teachers could not readily articulate their successes, but felt it was only

others who could make a judgement about their capabilities. Schools offer one, albeit narrow, source of performance accomplishment, with some (and more so the younger student teachers) having gained School Certificate Māori.

Vicarious experiences

The majority of the student teachers professed they had rather limited access to other Māori who were both fluent in Te Reo (language) and Tikanga (culture) which meant they felt they lacked a range of cultural experiences (vicarious experiences). Lack of vicarious experiences within the cultural context can be attributed to factors such as urban living and distance from their elders and or marae (Walker, 1990). At the College of Education, the more competent role model student teachers are inclined to enrol in the Tohu Pokairua (Kura Kaupapa teacher) programme. This means Māori student teachers in the general teacher education programme are often somewhat removed from these significant cultural role models. Furthermore the present structure of the College of Education programme does not allow for valuable interaction between the Tohu Pokairua student teachers and general education programme student teachers. Such an opportunity could be valuable as it would allow for increased vicarious experience opportunities for both sets of students. When Māori Studies was first set up this was a common practice and students were able to meet.

Verbal persuasion

Verbal persuasion has a particularly influential impact on these student teachers. The message received by most of them (especially those in the over 30 age group) was that learning and doing things Māori would be of no use or value to them. This view was reinforced by some parents, grandparents, and teachers, and was echoed throughout society, in the media and in schools. These messages had less impact on younger student teachers who had exposure to taha Māori, the Treaty of Waitangi, and other Māori initiatives implemented in schools. Just as verbal persuasion has had some negative impact on some student teachers it also provides them with the impetus to pursue learning Te Reo Māori and Tikanga.

Emotional arousal

Of the four sources of self-efficacy, emotional arousal has the greatest potential to threaten student teachers' cultural self-efficacy. Student teachers are plagued by feelings of inadequacy and self-doubt in the cultural context. Generally, their lack of Māori cultural experiences was one of the reasons they gave for their sense of cultural self-doubt. This was further exacerbated by their perceived lack of

competence in Te Reo. They considered that being of Māori descent and having little knowledge of their language and culture was at times embarrassing to them . This feeling contributed greatly to their feeling a low level of cultural self-efficacy. Sometimes other Māori and non-Māori expected them to know everything about Māori culture, and this caused some discomfort for some.

A comparison between the student teachers' academic and cultural source of emotional arousal suggests much frustration, and emotional upheaval. It appears less personally threatening in the academic context than in the cultural context, and some will avoid situations which they know will give rise to such feelings.

Pou Tuatahi: #Te Reo Māori

The key aspect of this pou (post) is that it provides one with the capacity to communicate, think, and feel Māori. While participants in general felt they had the ability to learn Māori, very few had the confidence to speak Māori. Some of these student teachers had been learning Te Reo Māori for a considerable time but in the main spoke English. There were several reasons for their minimum use of Māori language as a means of communication: many felt they could not sustain a conversation much past greetings and did not get to use it as often as they would like. Other student teachers mentioned barriers to their learning, such as past negative experiences, not being able to retain new words, and worries about correct pronunciation and correct grammar, all of which inhibited their production of language. Waru (interview participant) was having particular difficulties in dealing with how he might progress:

> My dad never spoke Māori to us, he didn't want us to learn it. Māori was totally snapped out of dad and we had it totally snapped out of us. That is why I have a switch that goes off every time I am forced to kōrero. I am literally scared to get up and speak. If the pressure gets put on me I get scared off (Waru).

In learning Te Reo Māori, the majority of these student teachers had a low level of confidence in speaking Māori. Not one participant felt confident in speaking Māori fluently. For most of these student teachers this lack of confidence meant they felt inadequate in total immersion Māori language zones. Student teachers who felt reasonably confident in a Māori context, however, felt that they would probably survive.

In spite of their Māori language profile, the majority of these participants reported that being able to speak Māori is of extreme importance to them both for when they teach and for their personal lives. All the interviewees confessed their dissatisfaction with their limited level of language development especially as all were keen to become fluent. Christensen *et al* .(1997), found similar attitudes in a Māori language survey in the Manawatu Whanganui region. The interviews confirmed also that they thought Te Reo Māori and Māori identity were in some way connected. The following excerpts from two interviews in the present study are indicative of this belief:

> Learning Te Reo is important for my own well-being, for my family and the one that I will have one day. I want to be able to have that taonga (Te Reo) and to also teach and help educate young Māori and give them what I got. It is important for them to know where they come from and who they are and knowing Te Reo helps this (Rima).

> The language is really important in coming to grips with my life, finding my other half that I have been denied. I've had this conflict or struggle for nearly all my life (Waru).

As an overall observation regarding learning Te Reo, these student teachers chose to learn Māori even though they lacked confidence and competence in learning it, and exhibited high levels of persistence whether they were highly self-effacious or not.

These student teachers felt particularly pressured to learn Te Reo Māori but showed signs of emotional stress in meeting not only its academic demands but also its social and cultural demands. Thus, their self-efficacy for learning Māori is quite low. Increasing effort is seen as having little effect, as the rewards are seen as too small: after much study they still cannot communicate effectively in Māori was how one person put it. Added to this the student teachers considered learning Te Reo Māori within the university somehow lacked context and was therefore superficial. The amount of time allocated for learning Te Reo Māori is considered to be very small, which to some means it is valued less by decision makers.

Regardless of what inhibits their learning, indications are that these student teachers need to spend more time on learning Te Reo Māori, with improved use of skills and strategies for learning it as a second language. Added to which there is a tendency

for mature-aged student teachers who are just beginning to learn Te Reo and Tikanga to feel less self-effacious than their younger aged colleagues.

Pou Tuarua: #Tikanga Māori

Tikanga comes with te reo, it goes hand in hand. You can't learn one without the other and it is really important.
(Rua, interview participant)

The key aspect of tikanga is that it provides the capacity to act in culturally relevant and appropriate ways. Overall, these student teachers were aware of Tikanga Māori and how tikanga manifests itself in particular situations like tangihanga (death) and hui (gatherings). Very few, however, felt confident about their ability to participate fully in some of these situations and stated that they felt more comfortable as observers and passive participants, rather than as leaders. The main reason given was that they felt they lacked experience and exposure in these situations. This is understandable given that most were not brought up in close proximity to their marae. The majority of these student teachers come mainly from urban situations, and while all could name their Iwi (tribal group) and Hapū (sub-tribal group), very few could discuss much past that. It is paramount however that these student teachers are equipped with a greater cultural knowledge base given that they will be expected to take on leadership roles in their communities.

Te Kupenga o te Mātauranga: #The marae as a learning institution

For these student teachers, Te Kupenga o te Mātauranga marae provides them with an important learning environment. In particular it allows them the opportunity to become fully involved in cultural activities. As a facility it is well utilised by these student teachers, developing in them a sense of belonging. Atmospheres that are compatible with traditional cultural forms therefore have a potential to empower these student teachers' learning (Penetito, 1996). These student teachers also claimed that Te Kupenga o te Mātauranga offered them opportunities to practise cultural traditions and customs under the guidance of lecturers and key cultural persons such as Kui Rangi and Koro Bob, (Te Kupenga o te Mātauranga elders). Providing a valuable source of knowledge and expertise, elders are a critical link in the transference of the culture (Penetito, 1996). Having a Māori presence within the institution meant that these student teachers felt they had a place to stand which was distinctly Māori in appearance and operation. This helped create a sense of belonging for them.

Although these students considered Tikanga Māori to be very important, they did not always take up opportunities to become involved in all the marae situations available to them, which may be indicative of their self-efficacy. However, there were student teachers who attended most (and sometimes all) marae activities. These student teachers also tended to be the ones who were more confident in a Māori situation and felt they had a role in the functioning of the marae (high self-efficacy in this context). While the marae is considered to be a valuable asset for all these student teachers, marae activities are more likely to be accessed by those student teachers who have confidence in their role in marae activities.

Some of these student teachers felt that some tikanga was best learned at their own marae and taught by their own elders. However, most were pleased to have the opportunity to learn as much as they could about tikanga on Te Kupenga o te Mātauranga. They felt overall that Te Kupenga o te Mātauranga had the potential to put them in touch with aspects of tikanga they had not yet experienced.

Like Te Reo, Tikanga was considered to be highly important in both their personal and professional lives. At times the ability to cope in certain situations was however a little threatening for these student teachers. Factors such as little or no exposure to marae and Māori ceremony while growing up, the effects of assimilation and integration policies, and parental desire for their children to do well in Pākehā education are reasons proffered to explain this.

Pou Tuatoru: #Kaupapa Māori

These student teachers viewed Kaupapa Māori as being anything related to Māori in education. They thought it was actioned by themselves in their participation in Māori Studies papers, and in the whānau classes outside Māori Studies, although not all student teachers were persuaded initially of its necessity. In describing the Whānau class, they generally saw it as enabling them to access information perceived to be relevant to their needs:

> I think people have got a right to determine how they want to live, they can't be continually told how to, and what to do. I think Māori should have the right to do things in the way they want to. My understanding is that most Māori are a lot more relaxed and that they are not tuned in to sitting down

> and listening to someone talk at them all the time. We like to talk things over and discuss things, so it is a group collective knowledge instead of an individual one: the whānau group allows us to do all of this plus more (Iwa).

Offering self-selected whānau classes as a choice is an important consideration in helping Māori student teachers begin to come to terms with knowledge that is applicable to themselves, in an environment that validates their experiences and knowledge base, as well it has the potential to enhance their cultural self-efficacy. Kaupapa Māori has an important role in the process of re-establishing and asserting Mana Māori, thus it can be a lever to help reverse both language shift and the effects of assimilation policies for Māori.

Pou Tuawha: #Ako

As discussed earlier, this study verifies that group learning, memorisation and rote learning, negotiation by discussion and learning in practical situations is highly valued (Metge, 1984). Within a cultural context, these student teachers had not really considered how they learned aspects of culture but on reflection stated that most things they had learned had been by either observing or by "just doing it." The student teachers who had been exposed to a range of cultural experiences seemed to be more aware of how they learned aspects of their culture which meant they also tended to access a greater number of opportunities. Metge describes learning and teaching (Ako) as a coherent pattern of principles, practised but not necessarily understood. This present study verifies these patterns and learning preferences by Māori (as described by Metge, 1984, 1986, 1995; Bishop, 1995). The study also found that these same patterns and learning preference were by and large transferred to non-Māori learning contexts such as in the University setting.

Te Papa: #Whānau

Both Whakapapa- based whānau and Kaupapa-based whānau are a major sources of these student teachers, collective - and self-efficacy in Māori cultural contexts.

Whakapapa whānau

Whakapapa-based whānau were extremely important to these student teachers. All knew in varying degrees their whakapapa, and related family stories, incidences and views of their tūpuna (ancestors). The student teachers who could talk extensively about whānau and tribal incidences were also the ones who tended to have higher levels of cultural self-efficacy.

In varying degrees all were supported by their whānau. Younger student teachers received mainly financial and cultural support. For older student teachers support from whānau tended to be more related to cultural and social support. One or two student teachers claimed to receive academic support from whānau also.

The whānau tended to be the social unit that operationalised these student teachers' cultural identity and development. The degree to which their whānau was involved in Māori cultural situations was a good indication of the student teachers, cultural self-efficacy. Therefore, student teachers whose whānau were actively involved in Tikanga Māori were more likely also to have a higher degree of self-efficacy within the cultural situation.

Te Tāhuhu: #Wairua

Student teachers found it difficult to explain what Wairua meant. Unlike Te Reo and Tikanga, student teachers viewed Wairua as that unknown aspect in their lives. These student teachers had a sense of relevance and presence of Wairua in their lives but were unable to fully articulate what is was. Some of the difficulty in expressing its meaning was related to distinguishing between spirituality, Christianity and Wairua Māori, (e.g. knowledge and presence of tūpuna). One response characterises the general feeling: "I am not sure as I am still in the process of finding out about my roots and my heritage". Some responses supported Metges findings (1995) in that their tūpuna in the spiritual realm continued to have a place and influence in their lives.

Karakia (prayers) was unanimously supported as having relevance in both a Māori learning environment and non-Māori learning environment. Explanations of the influences of karakia on their learning ranged from helping to focus their learning, an ambience of peace in the learning situation, and an open mind to acquire new knowledge. While they were generally keen to open each class with karakia, only a few felt capable of leading karakia. The student teachers who were more confident in using Te Reo Māori were generally the volunteers.

There are some speculative parallels between Wairua and self-efficacy in the sense that both can determine the degree and level of involvement in activities within a Māori situation, such as those who volunteer to lead karakia. Essentially, a person who has a strong Wairua Māori is one who also tends to have a strong cultural self-efficacy also.

Summary He Huarahi Ako: A Māori education framework

He Huarahi Ako provided this study with a cultural focus. The four posts, Te Reo, Tikanga, Kaupapa Māori and Ako had relevance for a teacher education programme, and Wairua and Whānau were considered important mediating factors between the posts. It was found that student teachers who were relatively strong in each of the posts were strongly supported by their whānau which meant they tended to also display higher levels of cultural self-efficacy. No individual was found to be high in self-efficacy in all the posts. Recent years have seen a strong focus on Māori language and cultural practices in schools. Therefore, ensuring that these student teachers are adequately equipped to meet the challenges of the posts is important, not only for individual benefit but also for Māori development too.

CONCLUSION

Summary of academic self-efficacy

Student teachers who enter College of Education with the prerequisite formal school qualifications of Sixth Form Certificate and Seventh Form Bursary are more likely to have an overall higher self-efficacy within the academic context than those who do not; that is they have past performance accomplishment. The student teachers most recently from secondary school were not only more relaxed in the academic environment but were also more inclined to be positive about their ability in the academic environment (emotional arousal). On the other hand, mature student teachers were more likely to have a lower sense of self-efficacy caused by a greater length of time away from school (that is past performance accomplishment) they also held some negative experiences of their schooling (that is verbal persuasion). There was also a double bind for mature student teachers because of whānau and other community commitments in which they were involved. Some mature students said that they were not as free to pursue the academic lifestyle as they wished.

A low level of goal setting and aspirations for high marks was noted amongst a high number of these student teachers. Many felt they were not always sure what they were doing in assignment tasks and so much discussion took place between them about what to do. Most, if not all, noted being able to improve their performance after the return of assignments. Reading and written tasks were described as sometimes daunting, and many felt they did not have the required skills, as they often found the study material incomprehensible and writing about it even more difficult. They preferred discussion and explanation to help them in comprehending material. Working in groups helped them overcome these feelings of inadequacy. Nearly all student teachers had been a member of an out-of-class study group during semester one.

A Māori student teacher's arousal state may be doubly affected (within an academic context) by perceptions related to their ethnicity as well as by their own individual anxieties. They thought that having Māori lecturers helped them overcome these feelings. Participants noted that not only did Māori lecturers provide positive role models and acted as confidantes, but they also understood their cultural and academic needs.

Summary of cultural self-efficacy

Student teachers who displayed high self-efficacy within a cultural context generally had been exposed to and had access to aspects of their culture from an early age. For example, they had access to their marae - and - or Kaumatua (elders), or strong schooling experiences (for example in Māori boarding schools) in Māori. They also tended to participate regularly in cultural activities (that is, vicarious experiences), and receive regular encouragement from whānau (that is, verbal persuasion). Student teachers who were more confident in a marae situation and felt they could make a contribution were more comfortable (that is, emotional arousal) and therefore more likely to participate. This meant they had a fairly highly developed sense of operating as a member of a collective group (vicarious experiences). As a result, these student teachers, under somewhat challenging conditions, persisted in cultural activities and sought ways to improve their knowledge and language capabilities. On the other hand, the student teachers who had low levels of cultural self-efficacy were characterised as having little exposure to aspects of their culture (that is, opportunities for vicarious experiences), which meant lack of participation and encouragement in cultural activities (that is opportunities for verbal persuasion). They were also more likely to lack confidence in some cultural settings (emotional arousal). In general, they tended to be brought up as a smaller whānau unit and so were less inclined to be automatically collectively orientated. Their sense of wairua Māori in many cases was more likely to be unexplored. As a result, these student teachers were more susceptible to higher levels of anxiety, less involved in marae activities and expressed feelings of incompetency in some cultural situations.

Indications were that having a high cultural self-efficacy was strongly related to whānau and their level of cultural involvement, or a significant person or person's involvement, whereas high academic self-efficacy was less to do with whānau involvement but more to do with the student teachers' schooling and teacher experiences (past performance accomplishments and verbal persuasion).

Academic and cultural self-efficacy a comparative overview

Self-efficacy is said to be context - specific rather than globally referred (Pajares & Miller, 1994). This study considered this point and measured self-efficacy within two contexts. The assumption that a student teacher who has high academic self-efficacy also has a high cultural self-efficacy was tested. The findings of this study suggest that high or low self-efficacy is not necessarily the same across two

contexts, but depends on a variety of factors. For example, some student teachers indicated high levels of academic self-efficacy but did not necessarily indicate high cultural self-efficacy. This varied in most student teachers responses, as seen in the academic self-efficacy scoring of interview participants (see Table 12) and cultural self-efficacy scoring of interview participants (see Table 15). Further, there are indications that within the cultural context these student teachers' collective academic and cultural efficacy are higher than their individual self-efficacy. One other comparison worthy of note between the contexts was the item of collective efficacy. This was found to be an effective contributing factor to student teachers' self-efficacy within both contexts. This is not surprising, given that Māori society is generally known to operate as a collective society, such as is evidenced in the organisation and functioning on the marae (Walker, 1990).

Limitations of this study

Researchers are warned that global scores which decontextualize self-efficacy behaviour have the potential to transform self-efficacy beliefs into generalised personality traits rather than the context-specific judgements Bandura suggests they are (Pajares, 1996). The present study, while attempting to be context-specific may in fact still have been too global in orientation.

The sample group who participated in the study were first year student teachers and therefore had only been at the college for one semester. This study may only have relevancy for first year Māori student teachers and not be able to be applied generally to other Māori student teachers in other year groups or programmes. To determine whether this study had veracity generally would mean following these and other student teachers through their teacher education programme. The findings from this study are an indication of this sample group, that while they may reflect some characteristics of the population, a larger study would be necessary to verify the generalisability of the findings.

Perceived cultural tensions

Student teachers were asked in the survey to consider their self-efficacy within an academic and cultural context. Within the academic context they were asked to indicate their perceived capabilities but the accuracy of the information may be questionable. One reason for this possible inaccurate self-appraisal may be cultural, as these student teachers come from a tradition that does not advocate talking about themselves, especially about how good they might be. A well-known proverb describes this concept (*Kāore te kumara e kōrero mō tana reka:* the kumara does not

speak about its own sweetness). To do so is considered to be whakahihi or a show off. Judgement about one's capabilities is more appropriate coming from others, such as ones elders or teachers. This factor could therefore explain the reluctance of participants to describe their capabilities, especially in relation to their cultural contexts. This may explain the particularly low scoring factors by many of the participants in cultural contexts.

There may be tensions for these student teachers between the academic context and the cultural context. This may be due to cultural differences between Māori values and Pākehā values. Māori basically aspire to collective values and attitudes, and Pākehā to individualistic values and attitudes. For example, student teachers in the academic context are by and large expected to do work as individuals, whereas in the cultural context there is a greater emphasis on group work and group outcome. The establishment of the whānau group in the College of Education has attempted to alleviate this difference by promoting Māori pedagogical practices. However, these papers remain inherently individualistic in structure, content, and assessment practices. Furthermore, these Māori student teachers may be unwittingly disadvantaged if they are not provided with the means to survive in the individual and competitive environment that inevitably drives the academic agenda of university study. This has the potential to be a source of conflict for these student teachers. Regardless, it remains that these student teachers are compelled to compete in individualistic ways. Further research may better inform how individual and collective values and attitudes can be combined so that outcomes are equitable for these student teachers. Until such time, Māori student teachers may continue to be disadvantaged if they do not possess the skills and strategies that are required for independent work habits. It is also clear that the ability to be able to make accurate judgements about their self-efficacy so that they may better judge their capabilities is important.

The relationship between self-efficacy and collective efficacy is important considering that these student teachers' cultural background may be an important factor in determining their success. An important consideration in developing better strategies for the teaching of these student teachers is that in developing their self-efficacy their collective efficacy should not be compromised, regardless of what context they are in. This is important not only for cultural reasons but because self-efficacy is important in mediating the tasks in which one engages for coping mechanisms, and insuring individual effort and perseverance. High self-efficacy is not only potentially empowering for individuals but for their whānau as well. As

such, self-efficacy and collective efficacy are important mechanisms in the development of Māori student teachers, not only for their personal lives but for their professional lives as well.

There is no doubt that there is a need to improve the performance of institutions to ensure that these Māori student teachers are successful, given their entry level of past performances and the high stress and anxiety they reported (emotional arousal). On the one hand, student teachers were generally self-efficacious due to high levels of support from their vicarious experiences and verbal persuasion sources. On the other hand, they were plagued by anxiety and lack of learning strategies. Improving these student teachers' performance accomplishments will require not only a greater amount of work spent on tasks, a greater amount of planning, and a commitment to achieving at higher levels, but also a greater commitment by the institution to adapt to suit the learning needs of these student teachers, such as has been mentioned previously. This should be reasonably easily attained, given that the student teachers already have a fairly well developed sense of motivation affected by other factors such as whānau and desire to work for Māori. These findings are timely, given the recent trends in teacher education to merge with universities, which essentially will mean that a university - style education - reduced contact time, larger classes and possibly more theoretically orientated courses is likely to take precedence.

While university is considered to be about independent and individual study, success is not only dependent on students' ability to study but on the institution's responsibility to cater for their specific needs. Those student teachers who are accepted in to these teacher education programmes require the resources to cope with the demands of such study. Meeting these demands satisfactorily will have the effect of increasing not only the student teachers' self-efficacy but also their collective efficacy. This in turn has implications for positive development for Māori. If teacher educators are committed to improving education for Māori by producing competent and confident Māori teachers in both contexts, then institutions must ensure that they provide these student teachers with relevant and appropriate experiences without compromising cultural concepts such as collectivity and cooperation to individuality and competitiveness.

The final chapter of this thesis ends with a waiata written for Te Kupenga o te Mātaturanga by Ataneta Paewai who finished her teacher education in early childhood education in 1994. Her waiata expresses the significance of Te Kupenga

o te Mātauranga for student teachers. The strength of Te Kupenga o te Mātauranga serves not only to strengthen student teachers but to nurture them, having the capacity to bond them to each other as a group but also to their ancestors. The kōwhaiwhai pattern used at the beginning of this thesis, He taura tangata (the human chain), exemplifies human togetherness as an essential strand in Māori teacher education and development.

Te Kupenga o te Mātauranga
stand tall as a place
a place of unity and caring relationships
reveal to us our ancestral links
so that Māori may stand strong

APPENDIX A

QUESTIONNAIRES

Appendix A is the questionnaire that was used during the survey. All participants received the same questionnaires.

HE HUARAHI AKO

Pathways to Learning

Tēnā koe e te tauira e tautoko ana i tēnei kaupapa, hei hāpai ngā akonga Māori.
Thank you for your participation.
The following survey is confidential, please do not name.

PART A: PERSONAL INFORMATION

1. Female ☐

   Male ☐

2. What is your tribal affiliation(s), if known.

3. What age group are you?

   18-22 ☐
   23-27 ☐
   28-32 ☐
   33-37 ☐
   38-42 ☐
   43 over ☐

4. Are you living with a partner?

   Yes ☐
   No ☐

5. Do you have children? (if no go to question 10)

   Yes ☐
   No ☐

6. How many?

7. Please list the ages of your children.

8. Does having children affect your ability to study?

1	2	3	4
not at all	sometimes	alot	extremely

9.In what ways?

10. Does your whānau support you in any of the following ways?

	1 not at all	2 sometimes	3 often	4 always
financially	☐	☐	☐	☐
providing food	☐	☐	☐	☐
child support	☐	☐	☐	☐
academically	☐	☐	☐	☐
emotionally	☐	☐	☐	☐
socially	☐	☐	☐	☐
culturally	☐	☐	☐	☐
other				

11.Within the last three months have you attended a whānau based activity, such as any of the following:

wedding	☐
birthday	☐
tangihanga	☐
christening	☐
whānau meeting	☐
unveiling	☐
wananga reo	☐
wananga tikanga	☐
Māori hui	☐
other	☐

12. Are you involved regularly with hapū or iwi activities?

1	2	3	4
not at all	seldom	often	always

13. Are you a whānau member of any of these groups?

kohanga reo	☐
kura	☐
church	☐
Te Kupenga o te Mātauranga	☐
sports	☐
other	☐

14. What kinds of support do you **get from** these whānau

	1 none	2 a little	3 some	4 alot
cultural	☐	☐	☐	☐
social	☐	☐	☐	☐
emotional	☐	☐	☐	☐
physical	☐	☐	☐	☐
financial	☐	☐	☐	☐
academic	☐	☐	☐	☐
other				

15. What kinds of support do you **give** them?

	1 none	2 a little	3 some	4 alot
cultural	☐	☐	☐	☐
social	☐	☐	☐	☐
emotional	☐	☐	☐	☐
physical	☐	☐	☐	☐
financial	☐	☐	☐	☐
academic	☐	☐	☐	☐

other

16. Does this mean time spent away from study?

1	2	3	4
not at all	sometimes	often	alot

17. When you consider the expectations you have of yourself, and those of your whānau which of the following is true?

You have greater expectations than those of your whānau ☐

Your whānau has greater expectations of you than you have of yourself ☐

Your expectations are similiar ☐

18. Are you learning te reo Māori?

Yes ☐

No ☐

19. How do you feel about your ability to learn Māori?

1	2	3	4
poor	little ability	good ability	high ability

20.How confident do you feel about your ability to speak Māori?

1	2	3	4
not at all	little confidence	very confident	extremely confident

21.How competently can you converse in Māori in everyday situations?

1	2	3	4
not at all	little competence	very competent	extremely competent

22.How often do you use Māori in everyday situations?

1	2	3	4
never	seldom	often	mostly

23. How important is being able to speak Māori for you as a teacher?

1	2	3	4
not at all	not very important	very important	extremely important

24.Is being actively involved in Māori activities important to you?

1	2	3	4
not at all	a little	very important	extremely

25.Do you feel strongly influenced by Māori ways of doing things?

1	2	3	4
not at all	a little	very influenced	extremely

26.Do you feel confident in a mainly Māori situation?

1	2	3	4
not at all	a little	very confident	extremely

27. Is learning about aspects of Māori culture important to you personally?

1	2	3	4
not at all	a little	very important	extremely

28. Is learning about aspects of Māori culture important to you as a teacher?

1	2	3	4
not very	a little	very important	extremely

PART B: PRIOR LEARNING

29. What is your highest academic qualification?

30 How influential are the following in explaining your academic successes:

	1 not at all	2 a little	3 alot	4 extremely
you tried hard	☐	☐	☐	☐
you had the ability	☐	☐	☐	☐
luck was usually on your side	☐	☐	☐	☐
the work was easy	☐	☐	☐	☐
good schools	☐	☐	☐	☐
good teachers	☐	☐	☐	☐
good peer influence	☐	☐	☐	☐
supportive parents	☐	☐	☐	☐

	1 not at all	2 a little	3 alot	4 extremely
whānau support	☐	☐	☐	☐
high motivation	☐	☐	☐	☐
you had a mentor	☐	☐	☐	☐

31. How influential are the following in explaining your academic failures:

	1 not at all	2 a little	3 alot	4 extremely
you didn't try hard enough	☐	☐	☐	☐
you lacked the ability	☐	☐	☐	☐
luck was against you	☐	☐	☐	☐
the work was really hard	☐	☐	☐	☐
bad schools	☐	☐	☐	☐
bad teachers	☐	☐	☐	☐
bad peer influence	☐	☐	☐	☐
non-supportive parents	☐	☐	☐	☐
lack of whānau support	☐	☐	☐	☐
no motivation	☐	☐	☐	☐

PART C: PERSONAL LEARNING INFORMATION

32. At the college of education what motivates your learning?

	1 not at all	2 a little	3 alot	4 extremely
desire to become a good teacher	☐	☐	☐	☐
desire to achieve well	☐	☐	☐	☐
desire to help others	☐	☐	☐	☐
desire to please the whānau	☐	☐	☐	☐
desire to do the best that you can	☐	☐	☐	☐

desire to please lecturers	☐	☐	☐	☐
desire to work for Māori	☐	☐	☐	☐
desire to be paid well	☐	☐	☐	☐

33. Do you feel confident in a mainly academic situation?

1	2	3	4
not at all	a little	very confident	extremely

34.Do you feel that you have the ability to do the academic tasks required of you?

1	2	3	4
not at all	a little	very able	extremely

35. When doing academic tasks, most times, would you best describe yourself as:

	1 not at all	2 sometimes	3 often	4 always
quietly confident	☐	☐	☐	☐
relaxed	☐	☐	☐	☐
productive	☐	☐	☐	☐
anxious	☐	☐	☐	☐
concerned	☐	☐	☐	☐
erratic	☐	☐	☐	☐
doubtful	☐	☐	☐	☐
procrastinator	☐	☐	☐	☐

36. Do you spend time helping other students' learning?

1	2	3	4
never	sometimes	often	always

37. Do you usually study on your own?

1	2	3	4
never	sometimes	often	always

38. Do you prefer to study on your own?

1	2	3	4
never	sometimes	often	always

39. Do you feel your learning is enhanced when working with others?

1	2	3	4
never	sometimes	often	always

40. How do you prefer to learn about how children learn and develop?

	1 not at all	2 sometimes	3 mostly	4 always
reading about it	☐	☐	☐	☐
one to one dialogue with lecturer	☐	☐	☐	☐
group discussion	☐	☐	☐	☐
tutorials, in small groups	☐	☐	☐	☐
observing	☐	☐	☐	☐
lecture presentations	☐	☐	☐	☐
writing about it	☐	☐	☐	☐
other				

41. How useful are these strategies in helping you retain information about how children learn and develop?

	1 not at all	2 a little	3 very useful	4 extremely
by rote learning	☐	☐	☐	☐
writing an essay	☐	☐	☐	☐
teaching someone else	☐	☐	☐	☐
keeping a journal	☐	☐	☐	☐
writing notes	☐	☐	☐	☐
writing a song	☐	☐	☐	☐
mind mapping	☐	☐	☐	☐
other				

42. How much influence does a lecturer have on your learning?

1	2	3	4
none	a little	alot	extremely

43. Does the lecturer being Māori make a difference to your learning?

1	2	3	4
none	a little	alot	extremely

44. Does a Māori lecturer make a positive difference?

1	2	3	4
not at all	a little	alot	extremely

45. Do you learn better, if Māori protocols are observed in your courses?

1	2	3	4
not at all	a little	alot	extremely

PART D: LEARNING ENVIRONMENT INFORMATION

46 Where do you study mostly?

	1 never	2 rarely	3 mostly	4 always
home/flat	☐	☐	☐	☐
Te Haonui	☐	☐	☐	☐
your study	☐	☐	☐	☐
bedroom	☐	☐	☐	☐
kitchen/lounge	☐	☐	☐	☐
anywhere- no fixed place	☐	☐	☐	☐
library	☐	☐	☐	☐
other				

47. Is karakia important ?

	1 not at all	2 a little	3 very important	4 extremely
in a Māori learning environment	☐	☐	☐	☐
in a non-Māori learning environ.	☐	☐	☐	☐
to start and end classes with	☐	☐	☐	☐
before an exam or test	☐	☐	☐	☐
helping you learn	☐	☐	☐	☐

48. In what ways does your spirituality or wairua help you in your academic learning?

-
-

PART E: LEARNING STRATEGIES

49. To achieve success in assignments, do you deliberately plan a course of action?

1	2	3	4
never	sometimes	alot	always

50. For most written assignments, is your goal to achieve:

- 50% ☐
- 60% ☐
- 70% ☐
- 80% ☐
- 90% ☐
- 100% ☐

51. Do you feel you have the ability to achieve this goal?

1	2	3	4
not at all	a little	very able	extremely

52. For most oral assignments, is your goal to achieve :

- 50% ☐
- 60% ☐
- 70% ☐
- 80% ☐
- 90% ☐
- 100% ☐

53. Do you feel you have the ability to achieve this goal?

1	2	3	4
not at all	a little	very able	extremely

54. How many hours on average each week do you spend on college tasks outside of college hours?

- 0-5 hours ☐

6-10 hours ☐

11-15 hours ☐

16 hours or more ☐

55. When you think about how capable you are academically how would you describe yourself?

1	2	3	4
not at all	a little	very capable	extremely

56. When you think about how capable you are as a teacher how would describe yourself?

1	2	3	4
not at all	a little	very capable	extremely

PART F: LEARNING TASKS

57. Assignment one professional studies, required you to make some observations of a child and relate your findings to some theoretical perspectives.
What did you actually do to complete the assignment?

-
-
-

58. Do you think your mark fairly reflected your effort?

1	2	3	4
not at all	a little	fairly	very fairly

59. Do you think your mark fairly reflected your ability?

1	2	3	4
not at all	a little	fairly	very fairly

60. How difficult did you think the task was?

1	2	3	4
not at all	a little	very difficult	extremely

61. How enjoyable did you find the task ?

1	2	3	4
not at all	a little	very enjoyable	extremely

62. How stressful did you find the task?

1	2	3	4
not at all	a little	very stressful	extremely

63. How anxious did you become during the task?

1	2	3	4
not at all	a little	very anxious	extremely

64. Do you feel more capable now of writing a similar assignment ?

1	2	3	4
not at all	a little	very capable	extremely

65 Task two in professional studies was to prepare for a test. Did you prepare for the test?

1	2	3	4
not at all	a little	alot	extremely

66. What did you actually do to prepare for the test?

-
-
-

67. Do you think your mark fairly reflected your effort?

1	2	3	4
not at all	a little	fairly	very fairly

68. Do you think your mark fairly reflected your ability?

1	2	3	4
not at all	a little	fairly	very fairly

69. How difficult did you think the task was?

1	2	3	4
not at all	a little	very difficult	extremely

70. How enjoyable did you find the task?

1	2	3	4
not at all	a little	very enjoyable	extremely

71. How stressful did you find the task?

1	2	3	4
not at all	a little	very stressful	extremely

72. How anxious did you become during the task?

1	2	3	4
not at all	a little	very anxious	extremely

73. Do you feel more capable of sitting a similar type test?

1	2	3	4
not at all	a litlle	very capable	extremely

74. Task four in professional studies was an oral presentation, with a partner. Did you prepare for the presentation?

1	2	3	4
not at all	a litlle	alot	extremely

75. Did you feel that working in pairs and researching the topic with a partner made a difference to your learning.

1	2	3	4
not at all	a little	alot	extremely

76. Was working in pairs more positive than negative?

1	2	3	4
not at all	more negative than positive	more positive than negative	extremely positive

77. How difficult did you think the task to be?

1	2	3	4
not at all	a little	very difficult	extremely

78.. How enjoyable did you find the task?

1	2	3	4
not at all	a little	very enjoyable	extremely

79. How stressful did you find the task?

1	2	3	4
not at all	a little	very stressful	extremely

80. How anxious did you become during the task?

1	2	3	4
not at all	a little	very anxious	extremely

81. Do you feel more capable of completing a similar assignment?

1	2	3	4
not at all	a little	very capable	extremely

82. Have you ever doubted your academic ability because of your ethnicity?

1	2	3	4
not at all	a little	often	extremely

PART G: GROUP RESPONSES

Either in groups or as individuals please answer the following:

1. What does Te Kupenga offer you?
•
•
•

2. What is necessary to ensure your success at College?
•
•
•

4. What makes either you or your group unique?
•
•
•

5. Where do you go if you need support?
•
•
•

6. How might this university cater better for your learning and teaching needs as Māori student teachers?

•
•
•

APPENDIX B

INFORMAL INTERVIEW SCHEDULE

Appendix B is an outline of the schedule of questions for the interviews. These questions were not necessarily asked in this order, neither was a strict adherence to the questions kept.

INFORMAL INTERVIEW SCHEDULE

Key Questions

- Do you feel capable of succeeding in Te Ao Māori?
- Do feel capable of succeeding in Te Ao whānui?
- What is the key for you to going in to the future?
- Do you regard Māori cultural values on a par with non-Māori values?

School background questions

1. Would you please briefly describe some of your earliest memories of school. What type of community did you live in? for example was it rural, urban or city?
2. What levels of support, (expectations) did you get from your whānau to do well in school?
3. Describe briefly your schooling experiences, indicating personal attitudes and any cultural adjustments you may have had to make.
4. In some detail describe some of your life experiences, for example, career history, kinship obligations, family community obligations (Māori and non-Māori), marae experiences etc.
5. Could you talk about the some of the influences or reasons that you have chosen to become a teacher? What are your expectations, goals, aspirations, frustrations etc...? What does University life mean to you and your / whānau ?

ACADEMIC SELF-EFFICACY

Briefly let us focus on Professional Studies.

How successful did you find yourself in this course? Describe your perceived ability, the difficulties you may have faced in the course? How much effort do you think you put in to this course? How much extra if any assistance did you need? Did you feel you achieved well in this course?

Were you a member of the whānau class? What significance if any did you feel the class offered? Describe briefly your learning experiences in that class? Did you feel it assisted in your learning?

How did you feel in comparison with other members of the class? Did it make you feel any different in comparison with other student teachers learning in other classess? How similar do you think you are to other student teachers? Do you compare yourself academically with others in the class? Were there things that could have been done to improve your learning?

How do you feel about your academic capabilities? Do you get stressed or anxious in academic situations? Do you feel confident in the academic setting? Do you enjoy doing academic activities?

CULTURAL SELF-EFFICACY

Te Reo Māori

Mā te kōrero i te reo e ora ai
Mā te ora o te reo ka rangatira

What are your thoughts about this whakatauaki? (please answer only if you wish to)
What are your past experiences with Te Reo Māori? Are there any significant persons that have encouraged your learning Te Reo Māori? Was Te Reo Māori a language you heard while you were growing up? Are there immediate family members who speak Māori?

What has prompted you to learn Māori? Do you feel capable of learning Te Reo Māori? How difficult or easy do you find being in a total immersion Māori speaking environment?

How important is being able to speak Māori to you personally and professionally? What do you expect to get from learning Māori while at College?

Tikanga Māori

What does Tikanga mean to you?
What experiences or memories have you of learning protocols and things Māori? Was there any significant person in your family who has influenced or led your whānau in these matters? Describe briefly some of your experiences in learning Tikanga?

How difficult do you find operating in a Māori situation, for example, on the marae in a pōwhiri situation. How easy/difficult do you find learning waiata, karanga, whaikōrero? How important is being able to operate in Māori situations for you? (for example on the marae). Talk about some of your experiences in learning some Tikanga. How much effort does it require of you to learn: Te Reo, learn some aspects of Tikanga. What are your aspirations for your learning Tikanga.

Kaupapa Māori

What does the term Kaupapa Māori mean to you?
Have you had any experience with Kohanga Reo, Kura or any other learning experiences that are Māori led and driven? Do you think Kaupapa Māori initiatives are important in education? How persuasive have others been in issues related to Māori while you were at school? What are some important concepts in Te ao Māori that as a teacher you feel you need to know?

Ako

What does the term Ako mean to you?

Thinking back on your schooling experiences, were there situations that you felt were a good way of learning? Were there some ways of learning that you felt were not very good? Did teachers and schools treat you any differently from other culturally diverse groups? Was your ethnicity ever a consideration in your learning? Do you feel confident in a Māori learning environment (such as the marae)? Does Te Kupenga o te Mātauranga make a difference to your learning: if so how and why? Describe the ways in which you feel it is best to learn a new waiata, a new sentence pattern, new words etc..

Whānau

How have your whānau contributed to your present situation. What levels of support do they provide while you are at College? In which areas of your learning do you feel they are most influential?

Wairua

What does the term Wairua mean to you?
How might it affect your everday choices and experiences in life?

APPENDIX C

INFORMATION SHEET

Appendix C was the information sheet which was distributed to participants before the commencement of the survey. The consent form was also given to participants at the time of the survey.

HE HUARAHI AKO

Pathways to Learning

INFORMATION SHEET
MASSEY UNIVERSITY

1. The researcher is presently lecturing at the Massey Universtiy College of Education. This study will fulfil in part, requirements for a Master of Philosophy. This study is being supervised by Ian Christensen who is academic staff, Te Pūtahi-a-Toi, and Dr Colin Gibbs, who is Director of Primary Programmes, College of Education, Massey University.

2. The researcher and supervisors may be contacted at the following addresses and phone numbers:

Frances Goulton-Fitzgerald
Professional Studies Department
Massey University College of Education
PALMERSTON NORTH.
phone: (06) 3579104

Ian Christensen
Te Pūtahi A Toi
Massey University.

phone: 35 69099

Dr Colin Gibbs
Director of Primary Programmes
Massey University College of Education.
phone: 35 79104

3. **Nature and Purpose of the study.**

It is hoped that this study will make a positive contribution to Māori student teacher education. The study aims to examine factors that affect the academic and cultural self-efficacy of Māori student teachers.

4. **What will be required and asked of participants.**

The particpants in phase one will be required to answer a survey of approximately one hours duration. Later a further four participants will be invited to participate in an interview.

5. **Anonymity and confidentiality.**

All information gathered during the study will be held in confidence. Individual replies to the survey will be confidential, as will interview data. Data and description of information will not be able to be linked to

individual participants. However, due to the sample size of the group, anonymity and confidentiality cannot be absolutely guaranteed.

6. The rights of the participants

You have the right to decline to take part. You also have the right to withdraw at any time, and you also have the right to refuse to answer any questions at any time. Participation is voluntary and is independent of any papers in which you are enrolled, or any assessment procedures associated with your course of study.

7. What are the benefits of the research?

Primarily this study hopes to make a positive contribution to Māori student teacher education. This study in identifying what factors affect Māori student teachers' academic and cultural self-efficacy can better inform practice at the College. Furthermore, this study proposes He Huarahi Ako: a Māori teacher education framework.

8. Information gathered

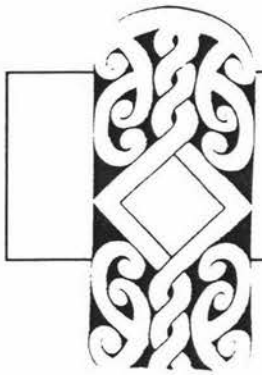
With your permission the interviews will be taped and transcribed by the researcher. The tapes will be code named, to protect the participant's identity. Unfortunately because of the small number of participants anonymity cannot be guaranteed. Tapes and transcriptions will be returned to the participants if requested at the completion of the study. All data will be stored by the researcher.

9. Informed Consent.

Written consent will be sought both before the survey and before the interviews.

10. If you take part in this study, you have the right

- to refuse to answer any particular question, and to withdraw from the study at any time
- to elect to complete the survey at home
- to ask any further questions about the study that occur to you during your participation
- to have your information handled in a way that it will not be possible to identify you in any reports that are prepared from the study.
- to a summary of the research findings



HE HUARAHI AKO

Pathways to Learning

CONSENT FORM

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

I understand I have the right to withdraw from the study at any time and to decline to answer any particular questions.

I agree to provide information to the researcher on the understanding that my identity is completely confidential. I am aware however that anonymity cannot be guaranteed if a participant of the interviews. After the conclusion of the research I agree that such information may also be used for thesis and or publication purposes.

I agree to the interview being tape recorded though I reserve the right to request that no recording be made for all or part of the interview.

I agree to participate in this study under the conditions set out on the information sheet.

Signed:

Name:

Date:

Survey participant

Interview participant

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