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**Academic success amongst a cohort of gifted and  
talented Māori and Pasifika secondary school boys:  
Elements that have contributed to their  
achievement**

A thesis  
submitted in fulfilment  
of the requirements for the degree  
of  
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THE UNIVERSITY OF  
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## **Abstract**

In recent years Māori and Pasifika students have been the focus of much discussion and a significant amount of research relating to underachievement. Despite this, many Māori and Pasifika secondary school boys are achieving highly in the academic sphere within the context of mainstream boys' state secondary schools in New Zealand. Achievement aside, evidence shows that Māori and Pasifika secondary school boys are seriously under-represented in programmes for the gifted and talented. This enquiry examines factors in relation to identifying gifted and talented students, and investigates how their abilities are forged and nurtured. The reasons for student success merit serious investigation because of how the multiple elements contributing to their achievement are likely to be applicable to others, and are a pressing concern for academic attainment in the New Zealand education system.

This qualitative study examines why 30 academically successful Māori and Pasifika secondary school boys achieved highly in the mainstream education system. The boys ranged from 13 to 19 years, the youngest being in his first year at high school as a Year 9 student, and the oldest being in his second year at university. The thesis argues their academic success was due to the complex interplay of home and school environmental elements, and the boys' intrapersonal characteristics. The study explored the boys' and parents' narratives to explain why students had achieved highly, and examined both the parents' and boys' perceptions of how well the schools had provided for their intellectual, emotional and cultural needs. Sociocultural learning theory is the main theoretical lens through which the findings are viewed. The methodology is primarily built upon narrative inquiry. The main method of data collection was by semi-structured interview, both individually and in focus groups. Supplementary methods utilised were questionnaires and observation.

An issue in the research was the disparity between the cultural and ethnic background of the participants and myself as the researcher. However, an endeavour was made to mitigate this by consulting with Māori and Pasifika educators, a kaumatua (elder) and iwi (tribal) representative prior to the research

commencing. In addition, models developed through this study were submitted to Māori and Pasifika educators for their comment and approval prior to being included.

With its focus specifically on highly-achieving Māori and Pasifika secondary school boys, this thesis makes an original contribution to the national and international discussion about raising student achievement. It provides a platform for further research to address the particular concerns around the underachievement of Māori and Pasifika secondary school boys.

While there are several implications arising from the research, all are linked to the need for policy makers and educators to address the issue of the underrepresentation of Māori and Pasifika students in programmes for the gifted and talented. Policies, practices and relationships need to be examined to evaluate how effectively they contribute to gifted and talented Māori and Pasifika students receiving the academic opportunities they deserve. A key part of this examination will need to include consultation with students and their whanau.

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# Table of Contents

Abstract .....	ii
Acknowledgements .....	iv
Table of Contents .....	vi
List of Figures .....	xi
List of Tables.....	xii
Chapter One: Introduction.....	1
Background.....	1
The impact of government reforms .....	6
International and national research.....	8
The EHSAS project .....	11
Research questions .....	12
Theoretical and conceptual frameworks.....	13
Sociocultural Learning Theory .....	14
Narrative Inquiry.....	17
Purpose of this study .....	18
Outline of chapters .....	19
Chapter Two: Literature Review – Pertinent issues related to the identification and nurture of talent in gifted and talented boys.....	21
Conceptions, definitions and characteristics of giftedness and talent .....	21
Unitary views of intelligence.....	21
Pluralised views of intelligence .....	24
Education sector developments .....	30
The EHSAS project .....	33
Social and emotional aspects of giftedness and talent.....	33
Summary.....	35
Needs of gifted and talented boys .....	35
Identity.....	36
Mentoring.....	37

Multipotentiality and advanced talent in a single domain .....	38
Underachievement .....	39
Family relationships.....	42
Intrapersonal qualities .....	43
Curriculum and pedagogy.....	44
Summary .....	52
Chapter Three: Literature review - Educational issues pertinent to students from minoritised cultures .....	54
Minoritised group conceptions of what constitutes giftedness and talent .....	55
Identification .....	61
Programme provision and pedagogy .....	71
Racial-ethnic identity .....	77
Summary .....	83
Chapter 4: Research Methodology .....	85
Introduction .....	85
Chapter overview.....	85
Qualitative research .....	86
Insider-outsider issues in research.....	86
Narrative Inquiry .....	90
Kaupapa Māori research methodologies .....	95
Research methodologies appropriate to Pasifika.....	97
Synergies with narrative inquiry, kaupapa Māori, Talanoa and teu le va research methodologies.....	99
Approach to analysis .....	99
Selection of students for particular classes.....	101
Student participant details .....	102
Research procedures .....	102
Methods of collecting data .....	105
Interviews.....	105
Questionnaires .....	110

Observations .....	112
Conclusion .....	116
Ethical Considerations.....	117
Trustworthiness of the data .....	118
Forms of analysis.....	120
Summary.....	122
Chapter Five: The influence of whānau .....	123
Results .....	124
The value placed on education.....	125
The expectation to achieve .....	128
Nurturing nature of whānau .....	129
Natural endowment.....	132
Discussion.....	136
The value placed on education.....	137
The expectation to achieve .....	141
Nurturing nature of whānau .....	145
Natural endowment.....	151
Summary.....	153
Chapter Six: Intrapersonal Characteristics .....	155
Results .....	155
Strong work ethic.....	155
Determination .....	158
Perseverance .....	162
Identity.....	163
Discussion.....	167
Strong work ethic.....	169
Determination .....	172
Perseverance .....	177
Identity.....	180

Summary .....	184
Chapter Seven: The influence of teachers and schools .....	186
Results .....	186
Relationships (Whānaungatanga) .....	186
Curriculum (Marautanga) .....	191
Implementation (Whakahāngai) .....	193
A place to stand (Tūrangawaewae).....	194
Discussion.....	198
Relationships (Whānaungatanga) .....	200
Curriculum (Marautanga) .....	209
Implementation (Whakahāngai) .....	214
A place to stand (Tūrangawaewae).....	216
Summary (Whakarāpopoto) .....	220
Chapter Eight: Summary of Findings, Limitations and Conclusion .....	221
Summary.....	221
The influence of parents and other whānau .....	221
Intrapersonal characteristics .....	223
The influence of teachers and schools .....	224
Limitations of the research .....	227
Cultural mismatch.....	227
The uniqueness of the two schools and the students involved in the research .....	228
The change in the focus of the thesis.....	229
The grouping of Māori and Pasifika students together for the research.....	229
Academic issues.....	230
The methodology .....	232
The pre-existing relationship between the researcher and some of the students .....	232
Conclusion.....	233

Implications of the research .....	234
Under-representation of Māori and Pasifika students in programmes for the gifted and talented .....	235
The role of parents and wider whānau in fostering education .....	237
Role models and mentoring .....	238
Access to ICT out of school .....	239
Consultation with students and their whānau.....	240
Procedural issues .....	241
Professional development .....	242
Suggestions for further research .....	243
Final remarks .....	245
References .....	248
Glossary.....	289
Appendices .....	292
Appendix 1: Topics to be covered by interviews .....	292
Appendix 2: Questionnaire for teachers of Year 9 and 10 GATE classes .....	294
Appendix 3: Letter to headmasters.....	296
Appendix 4: Sample letter to parents/caregivers.....	299
Appendix 5: Letter to teachers .....	302
Appendix 6: Letter to students/whānau .....	305
Appendix 7: Letter to kaumatua or iwi representative .....	308
Appendix 8: Criteria for classroom observations.....	311

## List of Figures

Figure 1: Differentiated Model of Giftedness and Talent (Gagné, 2010). (Reprinted with permission) .....	29
Figure 2: The Koru Toru Model (Miller whānau, 2014) .....	124
Figure 3: The Mangō Pare Model (Miller whānau, 2014) .....	199

## List of Tables

Table 1: Student participant details.....	102
Table 2: Interviews.....	109
Table 3: Observations .....	116

## Chapter One: Introduction

E tipu e rea, mō ngā rā o tō ao.

Ko tō ringaringa ki ngā rākau a te Pākehā hei oranga mō tō tinana.

Ko tō ngākau ki ngā taonga o ō tīpuna hei tikitiki mō tō māhunga.

Ko tō wairua ki te Atua, nāna nei ngā mea katoa.

Grow tender shoot for the days of your world.

Turn your hand to the tools of the Pākehā for the wellbeing 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.

- Sir Āpirana Ngata (Walker 2001, p. 397)

### Background

In the 1960s when my parents discussed politics, they would sometimes refer to Sir Āpirana Ngata. Although they were not of Māori<sup>1</sup> descent, it seemed to me that he was the politician they most admired from New Zealand history. They spoke of him as a well-educated man, a great orator and leader, a man who strode the stage of politics with integrity and dignity, and a man who worked tirelessly to improve the lot of his people. King (2001), when reviewing Ngata's biography states he is the "colossus of Māori affairs in the 20<sup>th</sup> century" (p. 1). When studying New Zealand history in Year 12 at High School, I began to understand my parents' admiration for Ngata. He was a truly remarkable man, becoming the first Māori to gain a university degree when he completed his BA at Canterbury University College in 1893 at the age of 19. He then went on to complete his LLB degree in 1896, becoming the first New Zealander, Māori or Pākehā to complete both a BA and an LLB. In addition he fashioned an illustrious political career. In 1948 the honorary degree of DLitt was conferred on Ngata through the University of Victoria, Wellington for his "magnum opus" (Walker, 2001, p. 378) *Ngā Mōteatea*<sup>2</sup>. His gifts and talents were recognised and nurtured from early

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<sup>1</sup> The term used for the indigenous people of New Zealand. People of Cook Islands' ethnicity also

<sup>2</sup> Traditional Māori song poetry

childhood by his parents, kaumātua<sup>3</sup>, kuia<sup>4</sup> and teachers, including the headmaster of Te Aute College<sup>5</sup>, Thornton<sup>6</sup> (Walker, 2001). Studying history also turned my attention to political contemporaries of Ngata, Sir Maui Pomare, New Zealand's first Māori to obtain a medical degree, and Te Rangi Hīroa (Sir Peter Buck), also a doctor. They too were graduates of Te Aute College and had their talents identified and encouraged by Thornton (Barrington, 1993). The poem in my introduction was penned by Ngata in a child's autograph book and was written to encourage her to educate herself for the new world she would face.

Today, recognising and encouraging talents of Māori students remains an important challenge for New Zealand education at all levels. The underachievement of Māori students as well as Pasifika<sup>7</sup> students is of utmost concern revealed in a marked under-representation in academic programmes for the gifted and talented<sup>8</sup> (Keen, 2004; Riley, Bevan-Brown, Bicknell, Carroll-Lind & Kearney, 2004; Ministry of Education, 2012a).

My awareness of the underachievement of Māori boys in particular stems from my primary school years. Throughout my early schooling to the end of Year 8, I was a student in classes with Māori boys. Generally they did not appear to enjoy school and were often at the lower end of the class in academic achievement. However, the Year 4 class at primary school taught by a 19 year-old woman teacher in her first year of teaching was an exception. I noticed that the Māori boys seemed to hold her in high regard, as I did, and that they appeared to achieve more highly than in any class thereafter. Fifty two years later I arranged to meet that teacher again to thank her for the difference she had made to my life. I commented that her class was the only one in my entire schooling where all the Māori boys seemed to have an affinity for the teacher, including one who appeared to me to be capable in the academic field. I asked her why she thought

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<sup>3</sup> Elder(s)

<sup>4</sup> Elderly women, women tribal elders

<sup>5</sup> An Anglican Church boarding school for Māori boys of secondary school age

<sup>6</sup> Headmaster of Te Aute College from 1878 to 1912

<sup>7</sup> A person of Polynesian, Melanesian or Micronesian descent.

<sup>8</sup> "Gifted" refers to having natural abilities that enables an individual or group to stand out from their peers. "Talented" refers to having developed competencies to an advanced level for an individual or group's age. See Gagné's (2010) Differentiated Model of Giftedness and Talent (DMGT) p. 27.

the Māori boys seemed so fond of her. She said that she had grown up with Māori as neighbours and friends and had played and attended school with them. She also said that she really valued the contribution of every child in the class and endeavoured to show she cared for them. This teacher appeared to value each individual student and recognise and nurture their talents, creating a whānau<sup>9</sup>-type atmosphere in the classroom. It also seemed that she did not hold deficit assumptions about Māori achievement. It is apparent, in retrospect, that aspects of the Effective Teaching Profile (ETP) developed by Bishop and Berryman (2009) were in place in her classroom. Amongst other criteria the ETP states: “Effective teachers demonstrate on a daily basis that they: care for the students as culturally located individuals [and] have high expectations for students’ learning” (Bishop, Berryman & Wearmouth, 2014, p. 9).

When I began secondary schooling, where the classes were streamed<sup>10</sup> based on academic ability, the Māori boys who had been in my classes at primary school were no longer in the same class. It seemed they had not achieved as well in the regimented classrooms that followed Year 4, perhaps missing the whānau-type atmosphere and very likely having their talents unrecognised. I was in the academic stream of the school and the only Māori student in the class was a boy who had attended a different primary school, a small rural school where the majority of students were Māori. He became a close friend and competed successfully in a class where he was the only Māori student. I began to wonder why he achieved highly while other Māori students were not achieving to a similar standard. Had his talents been recognised and nurtured by his whānau and/or primary school?

After finishing secondary school I trained as a primary school teacher returning to teach in the same school where I had been a student. For two years in the late 1970s I taught what were considered to be the top 15 to 20 per cent of Year 5 and 6 students in the school. There was one Māori boy in each of those classes and one Māori girl in one class and two in the other. This was well below what the Māori demographic data would have suggested should be the case. The

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<sup>9</sup> Extended family

<sup>10</sup> A system where students of similar ability are grouped together

experience ignited my passion for teaching gifted and talented students, and I sought to nurture the talents of all students by providing them with an affirming environment and appropriate educational challenge. While teaching at this school I had the privilege of staying with another teacher and her class for a week on the Judea Marae<sup>11</sup> near Tauranga. This was a profoundly moving personal experience both for me and the students; I had never before experienced such an outpouring of unconditional love, with the tangata whenua<sup>12</sup> treating every student and visiting adult as special and precious. It was there I learned the importance of whakapapa<sup>13</sup> to Māori and began to mull over what links it might have to learning. It was there too, I first saw demonstrated the immense gifts and talents of Māori in their traditional performing arts and began to wonder how these could be linked together with other educational practices.

In a succession of five other teaching positions over the next 11 years, I taught fewer Māori students reducing my involvement with Māori whānau. However, after being appointed to a principal's position with a 42% Māori and 21% Pasifika roll I became engaged more than ever before with the Māori community and formed a bond with the Pasifika community. It was the first time I had been involved in a school with Pasifika students, although I had a Pasifika brother-in-law and nephews. My own three daughters embraced being part of this school community and were all part of the kapa haka<sup>14</sup> group and/or the Cook Islands Māori singing and dance group that performed in the local Polynesian Festival. While in this principal's position for nine and a half years, I worked with four Māori members of the board of trustees, one of whom was board chairperson for six years. It was in this position that I also developed a close friendship with the profoundly gifted Pacific Islands liaison officer for the school. It was here too that, in recognition of the need for gifted and talented students to be given more challenge to have their talents nurtured, amongst other measures, I taught a withdrawal group of the school's top Year 5 and 6 mathematicians. This group included several Māori and Pasifika students, and amongst these top

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<sup>11</sup> Meeting place of whānau or iwi

<sup>12</sup> People of the land, the people with authority in a particular place

<sup>13</sup> Genealogy

<sup>14</sup> Māori performing arts

mathematicians was a Māori girl who became the regional 24-game mathematics champion for her year level.

The following six years were spent as principal of a primary school with a 57% Māori roll where I worked alongside two Māori trustee board members. In this school too, I withdrew the top Year 5 and 6 mathematicians to provide them with more challenge. Up to 24 students were in the group with around half of them being Māori. In my last year there, the school's Year 5 and 6 mathematics problem solving teams were both placed second in the region. Three of the six competitors were Māori. While in my last year at this school, students competed in the individual regional chess championships. I registered our top seven players – five Māori girls, a Māori boy and my son. Four of the Māori girls defeated boys from the top primary school (a private school) chess team in the region, one of them placing fourth overall. While principal of this school I also initiated kapa haka being offered in the school motivated by the desire to identify and nurture talent. In an effort to improve my understanding of Māori students and whānau I studied Level 1 te reo Māori<sup>15</sup> through Te Wānanga o Aotearoa<sup>16</sup>. In addition, I was involved in, and supported the application of a local kohanga reo<sup>17</sup> to the Ministry of Education to develop a partnership with the school, and utilise spare buildings on the school site. This idea came to fruition shortly after I moved from the school.

My most recent position was as Dean of the GATE (Gifted and Talented Education) programme in a school which was one of three state boys' secondary schools involved in a Ministry of Education funded project known as Extending High Standards Across Schools (EHSAS)<sup>18</sup>. This project provided the inspiration for this study. As Dean I oversaw the programmes of many academically gifted and talented Māori and Pasifika boys for seven years until I resigned my position to complete this thesis. While in this position, affirmative action was introduced to raise numbers of Māori and Pasifika students in GATE classes and mentoring

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<sup>15</sup> Māori language

<sup>16</sup> The University of New Zealand

<sup>17</sup> Total immersion Māori language preschool

<sup>18</sup> Projects awarded to individual schools or groups of schools between 2006 and 2009, aimed to raise educational standards through collaboration

programmes were introduced to assist Year 9 gifted and talented Māori and Pasifika boys to improve their academic achievement. The school also became part of the He Kakano<sup>19</sup> (Ministry of Education, 2012b) project to foster Māori student achievement as Māori. Again, these initiatives were about recognising and nurturing talent.

### **The impact of government reforms**

My personal educational journey has involved a growing understanding that educators are responsible for identifying and nurturing student talent. This understanding has been reflected in developments in the New Zealand educational system, particularly over the last 27 years. Throughout these years there has been comprehensive reform of the education system beginning with the release of *Administering for Excellence* (the Picot Report) in 1988. While this report was primarily about administrative reform it provided the impetus for *Tomorrow's Schools* which was initiated by the Prime Minister and Minister of Education, Lange (Openshaw, 2009). It was his hope and belief that giving schools autonomy would address important issues in educational services. It was anticipated that home-school partnerships would increase, educational opportunities would improve, and achievement of Māori and children from low socio-economic groups would rise (Lange, 1988).

Fancy (2004), New Zealand's Secretary for Education from 1996 to 2006, stated that the years 1996 to 2003 were about refocusing education policy on student achievement. The Labour-led government elected in 1999 made explicit its intention to raise the achievement of groups who were not achieving in the education system. There was a strong emphasis on professional development, particularly focused on the areas of literacy, numeracy, ICT, special education and assessment. Two projects were very influential in changing policy and practice in order to raise the achievement of Māori and Pasifika students: Te Kotahitanga<sup>20</sup> and Strengthening Education in Mangere and Otarā (SEMO). Both of these projects are discussed further in Chapter three of the literature review.

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<sup>19</sup> Literally means “a seed”

<sup>20</sup> Literally means “unity”, “openness”, “harmony”

After 2003 there was further redefinition and focus on educational reform. The government's goal was to build on the success of numeracy and literacy projects and continue to make improving student achievement a priority. Fancy (2006) argued that the issues that needed attention in order to raise student achievement were effective teaching, and engaging families and communities. He, like others (Bishop et al., 2014; Hattie, 2009; Stronge & Hindman, 2003), stated that effective teaching is the single greatest contributing factor to students' learning and success. Fancy postulated that effective teachers are cognisant of students' home and community environments and adjust their teaching accordingly in order to make it more motivating and relevant. To improve the effectiveness of teachers the Ministry of Education sought to improve their knowledge of curriculum, their students and pedagogy. To achieve teaching goals it was also considered necessary for families to engage with and support their children in their education (Fancy, 2006). The EHSAS project was one of many Ministry of Education initiatives that made raising student achievement a priority.

The Ministry of Education recognised the underachievement of Māori and Pasifika students as an issue of national concern. As a result, the *Pasifika education plan 2008-2012* (Ministry of Education, 2007a) and *Ka Hikitia – Managing for success: The Māori education strategies 2008-2012* (Ministry of Education, 2008a) were developed. These documents outlined the government's goals and planned actions for developing the New Zealand education system in a way that would be more responsive to the needs of Māori and Pasifika learners. In 2008, a National-led government was elected in New Zealand. The strategy and plan were incorporated into the new government's strategic direction outlined in *Statement of intent: 2009-2014* (Ministry of Education, 2009). The overarching goal aimed at, "a world class education system that equips all New Zealanders with the knowledge, skills and values to be successful citizens in the 21<sup>st</sup> century" (p.1). A key objective of the statement was, "Māori enjoying success as Māori" (p. 1). In order to achieve this objective and enable Māori students to raise their achievement, Māori approaches and needs would influence policy development and implementation, and the teaching profession would recruit increasing numbers of capable te reo Māori teachers.

The Ministry of Education then released the *Pasifika Education Plan 2013-2017* (Ministry of Education, 2012c) and *Ka Hikitia – Accelerating Success: The Māori Education Strategy 2013-2017* (Ministry of Education, 2013) which chart goals, targets and actions for sector-wide Māori and Pasifika education over a five-year period. Unlike the previous plans and strategies, the current plans and strategies specify targets in terms of percentages, or comparison with other groups, from early childhood through to tertiary education. The most dramatic specified improvement in results in order to achieve a target at the secondary school level is in University Entrance results. The plans and strategies require that by 2017 Māori and Pasifika achievement rates will be on a par with other groups. Of the students who participated in University Entrance in 2013, 77.3% of New Zealand Europeans and 78.1% of Asians in Year 13 gained University Entrance. By comparison 53.1% of Māori and 47.3% of Pasifika students gained University Entrance (New Zealand Qualifications Authority, 2014a). The current *Ka Hikitia* strategy identifies two critical factors for Māori to be able to achieve as Māori. These are: “Quality provision, leadership, teaching and learning supported by effective governance” (Ministry of Education, 2013, p. 23), and “Strong engagement and contribution from students and those who are best placed to support them – parents, families and whānau, hapū, iwi, communities and businesses” (Ministry of Education, 2013, p. 23).

### **International and national research**

As discussed earlier in this chapter, Māori and Pasifika students have been significantly under-represented in academic programmes for the gifted and talented in New Zealand. Eurocentric conceptions of what constitutes giftedness and talent and how to identify these traits have been utilised to identify students for these programmes. However, educators have frequently failed to differentiate between the prevalent Euro-American understanding of intelligence (or intellectual giftedness and talent) based on IQ tests (Kaufman & Sternberg, 2007) and what Sternberg (2004) terms successful intelligence. The latter, Sternberg defines as: “the skills and knowledge needed for success in life, according to one’s own definition of success, within one’s sociocultural context” (p. 326). Conceptions of what constitutes giftedness and talent are socioculturally defined.

There are commonalities across cultures but also many differences within and between cultures. Sternberg (2007, p. xvi) encapsulates these similarities and differences, positing:

In all cultures, people have common processes – to recognize when they have problems, define what the problems are, allocate resources for solving the problems, mentally represent the problems, set up strategies for solving the problems, and then monitor and evaluate their solutions. But the contents to which these processes are applied may differ greatly from one culture to another.

In addition to differences in contents, implicit in differing conceptions of giftedness and talent, there are different ways of thinking and different ways of viewing the world (Phillipson, 2007a).

Data on students represented in programmes for the gifted and talented, both internationally and nationally, suggest little account has been taken of the diverse conceptions of giftedness and talent evident in society. For example, data from the United States Department of Education Office for Civil Rights Elementary and Secondary School Data (2012) shows significant under-representation of African American and Hispanic American students in programmes for the gifted and talented. In districts offering GATE programmes, African American students were 19 per cent of the population but 10 per cent of the GATE programme participants. Hispanic American students were 25% of the population but 16% of the GATE participants. By contrast, white students were 49% of the population but constituted 62 per cent of the participants. Keen's (2004) study in New Zealand also found Māori and Pasifika students were represented in programmes for the gifted and talented at about half the rate of their New Zealand European counterparts. In the early stages of the EHSAS project, 2006 and 2007, the Milestone reports (School A, 2006, 2007) indicated a similar profile for Māori and Pasifika student involvement in GATE programmes in two of the schools. The third school had even more significant under-representation, particularly for Pasifika students where none of the 45 eligible students were represented in 2007.

Clearly there are ongoing issues related to identification and the nurturing of talent for students whom Ford describes as, “racially and culturally different” (2011, p. xxiv). Fundamental to addressing these issues of under-representation is countering the negative influence of deficit thinking. Simone (2012, p. ii) states: “Deficit thinking equates the poor academic achievement of students from low-income and culturally and linguistically diverse communities with factors outside the control of the school.” In New Zealand the Te Kotahitanga project (Bishop et al., 2014) revealed most teachers explained the underachievement of Māori students in terms of deficit theorising, placing the blame for poor performance upon Māori students themselves and/or their whānau. For example, these teachers considered inadequate parent support, limited knowledge and skills, and low academic aspirations as being responsible for low achievement amongst Māori students. However, students, their parents, school principals and a minority of teachers considered that the quality of in-class interactions and relationships was the key determining factor in achievement. Bishop et al. (2014) outline how deficit theorising has led to negative social and educational consequences for Māori with societal power imbalances being perpetuated and students in the classroom misbehaving, and some absenting themselves altogether. In Ford’s (2011) view, deficit thinking has also been especially destructive in the educational and social lives of Hispanic and African American students, particularly males.

One of the inevitable outcomes of deficit theorising is that such teachers hold low expectations for Māori students. Bevan-Brown (2010, 2011a) identified low teacher expectations as an example of negative teacher predispositions and conduct that become barriers to gifted and talented Māori student achievement. There is evidence to show that the opposite, high expectations are beneficial. For instance, Fletcher, Parkhill and Fa’afai (2005) found that Pasifika students who achieved well had teachers who had high expectations of their achievement. These researchers considered that the publicity regarding low Pasifika student achievement had historically led to the marginalisation of Pasifika students and reinforced deficit thinking. A similar trend was evident amongst teachers of Māori students. A counterpoint to these low expectations was the development of the ETP (Effective Teaching Profile) as a result of conversations with Māori

secondary school students (Bishop et al., 2014). Fundamental to the ETP was a change in mentality of educators from deficit thinking to what Bishop et al. (2014) term, “agentic, discursive (re)positioning” (p.9). In so doing they were able to view themselves as agents of change. Further issues related to the identification and nurture of talent are discussed in subsequent chapters of this thesis.

### **The EHSAS project**

In April 2006, School A (School A, 2006) won a contract with the Ministry of Education through EHSAS funding. The funding extended from April 2006 to December 2009 and the contract stated: “School A will co-ordinate/lead a joint project developing an effective Gifted and Talented Education (GATE) programme that caters for the intellectual, emotional and cultural needs of their GATE boys” (Ministry of Education, 2006, p. 1).

The contract involved working with School B and School C as partner schools, all three schools being state boys’ secondary schools. While the project had multiple objectives, all schools agreed that its key facet was addressing issues related to the identification and programme provision for academically gifted and talented Māori and Pasifika boys. (While it is acknowledged that there are differences in the various Pacific Island ethnic groups, in order to protect the anonymity of participants in the research as much as possible, the term, Pasifika, is used). Through various circumstances only one of the partner schools was able to be involved in the research project.

Initially, the aim of this study was to explore what the impact was of School A mentoring School B and School C through the EHSAS project, working collaboratively to develop systems and strategies to meet the needs of gifted and talented Māori and Pasifika secondary school boys. There is some research regarding the identification and involvement of gifted and talented Māori and Pasifika students in extension programmes (Keen, 2004; Riley et al., 2004). However, at the time this research commenced in April 2007, the literature did not detail how gifted and talented Māori and Pasifika students in the specific context of boys’ secondary schools were identified and what provisions schools were

making for them in terms of nurturing their talents. It was important that the perspectives of boys in these settings, their parents and teachers in the schools, were studied to add to the literature on gifted and talented Māori and Pasifika.

As a result of data gathered in the course of interviewing participants, the emphasis of the research shifted. When the boys who were being interviewed spoke of the role of the family and their own intrapersonal characteristics in their success, it was evident that many of the reasons for their success could not in any way be linked to the EHSAS project. Nevertheless, almost half the boys interviewed also spoke of the role of teachers and schools in their success, and in this regard, there is a connection to the EHSAS project. It was decided to also investigate what elements outside of the school contributed to the academic success of Māori and Pasifika boys. After gathering most of the data it was decided to make the focus of the thesis inclusive of both school-based and other elements contributing to achievement. This study drew data from the EHSAS project in the first instance but is not an examination of EHSAS per se. The funding of EHSAS was discontinued<sup>21</sup> from the end of 2009 after the election of a new government in November 2008. Nonetheless, the issue of achievement for gifted and talented Māori and Pasifika students remained the focus of this study.

### **Research questions**

The thesis starts with prima facie evidence that Māori and Pasifika boys are under-represented in academic programmes for gifted and talented students. While there are some Māori and Pasifika boys who are represented in such programmes, this research had its genesis in a question about what was driving these boys to achieve, and why more boys were not featured in the programmes. The key research questions, on which this study is based, centre on the identification and nurture of talent, and an investigation into the reasons why 30 Māori and Pasifika secondary school boys were successful in their academic studies. The central question is: “What are the most significant elements contributing to the success of academically gifted and talented Māori and Pasifika secondary school boys?” This is supported by an ancillary question: “How

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<sup>21</sup> All EHSAS projects nationwide were discontinued as a budgetary measure during a time of economic recession, and were not a criticism of the projects per se.

effective have schools and teachers been in meeting the needs of gifted and talented Māori and Pasifika secondary school boys?”

It was expected that a range of elements would be identified as contributing to the students' academic success. From the initial literature review (e.g. Freeman, 2000; Henderson & Berla, 1994; Israel, Beaulieu & Hartless, 2001) it was clear many participants would consider the influence of family to be significant. It was also predicted from the literature (e.g. Bishop & Berryman, 2006; Keen, 2004; VanTassel-Baska & Stambaugh, 2006) that teachers and a school's ethos would be important motivators of student achievement. An assumption to be tested was whether or not, given the already high achievement levels of the student participants in the study, most viewed their schools as meeting their intellectual needs adequately, and if there were significantly diverse responses about how well emotional and cultural needs were being met.

With Keen (2004) and Riley et al. (2004) highlighting the under-representation of Māori and Pasifika students in programmes for the gifted and talented in the wider New Zealand context, and Māori and Pasifika students in participating schools in the EHSAS project following the same pattern, it was decided that this issue should be researched. By the time this study commenced in 2007, the Te Kotahitanga project (Bishop, Berryman, Cavanagh & Teddy, 2007) was already addressing the issue of Māori underachievement, and the SEMO project (Ministry of Education, 2004) was working in the field of Pasifika underachievement. It was decided therefore not to study students who may be gifted and talented, but underachieving, and instead to focus on a cohort of Māori and Pasifika secondary school boys who were already achieving academic success within the mainstream education system. It was hoped by focusing on these students' and their parents narratives that the research findings could have positive implications for raising numbers of high-achieving Māori and Pasifika students across the country.

### **Theoretical and conceptual frameworks**

Denzin and Lincoln (2005) argue: “All research is interpretive; it is guided by the researcher's set of beliefs and feelings about the world and how it should be

understood and studied” (p. 22). This research is underpinned by two interpretive epistemologies: the theoretical framework of sociocultural learning theory and the conceptual framework of narrative inquiry. Sociocultural learning theory provides a framework for relational understanding and narrative inquiry enables the stories of participants to be told.

### **Sociocultural Learning Theory**

The pivotal importance of relationships in this study requires a theoretical framework that acknowledges the importance of understanding individuals within their sociocultural contexts. Sociocultural learning theory aims to explain how the inner mental processes relate to historical, cultural and institutional contexts. It focuses on the psychological development of individuals occurring through culturally organised activities and social interactions (Scott & Palincsar, 2013).

The development of sociocultural learning theory emerged from the work of Vygotsky (1978) who was critical of the prevailing theories of the time concerning the relationship between learning and development. He believed that what children could achieve when working alone is less than what could be achieved by working with more capable others. Bevan-Brown (2009) cites the *tuakana-teina*<sup>22</sup> relationship as an example of the way an older, more expert Māori can assist one who is younger. Vygotsky considered that what people could achieve in collaboration with others was a superior indication of mental development than what they could do by themselves. He proposed that children should be working in: “the zone of proximal development... the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86). Although there is more to human intellectual development than this, Vygotsky posited that if an individual is able to imitate another’s activities it is an indication that what is copied is within the individual’s developmental level. He viewed learning as creating the “zone of proximal development.” In explaining

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<sup>22</sup> Older or more expert brother, sister or cousin (traditionally of the same gender) helping and guiding a younger or less expert sibling or cousin.

the link between learning and development Vygotsky stated:

Learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers....learning is a necessary and universal aspect of the process of developing culturally organized, specifically human, psychological functions. (p. 90)

Vygotsky considered that learning provides the foundation for later development of complex internal processes in thinking.

While Vygotsky pioneered the development of sociocultural learning theory others built on and modified his work. For example, (Rogoff, 2003) developed an alternative model of cultural development that focuses on participation rather than internalisation. Rogoff (2003) claims there is an “overarching orienting concept for understanding cultural processes.... Humans develop through their changing participation in the sociocultural activities of their communities which also change” (p.11). This overarching concept provides the basis for the other key concepts required to understand cultural processes. These include the notion of culture as not simply being about other people’s activities. Rather, understanding one’s own cultural background in addition to other cultural groups requires adopting the perspectives of people from diverse backgrounds, and recognising that cultural practices are interconnected. Furthermore, individuals and cultural communities are engaged in a continuous process of change but there is unlikely to be one best approach to negotiating change in order for ongoing learning to occur (Rogoff, 2003).

To understand cultural processes, not only are key concepts important, but also a clear definition of culture. Inglis (2005) proposes: “Culture comprises the patterns of ideas, values and beliefs common to a particular group of people, their ‘characteristic’ ways of thinking and feeling” (p. 7). Barker (2008) reasons that when culture is viewed in this way it is linked to forms of social power, motivates people to act in particular ways, and is expressed in artefacts and symbols. Every subject taught at school and every classroom has its own sociocultural context that influences how people act and impacts on the learning that takes place. Barker

further reasons that learning to be in school itself and learning in all curriculum areas is about recognising one's own cultural location, becoming aware of cultural differences and negotiating cultural boundaries.

*The New Zealand Curriculum* (Ministry of Education, 2007b) recognises the importance of sociocultural contexts in student learning. It states: "Learning is inseparable from its social and cultural context....The classroom culture exists within and alongside many other cultures, including the cultures of the wider school and the local community, the student's peer culture, and the teacher's professional culture" (p. 34). All of these cultures are linked and arguably impact on students' identity and what they achieve.

For some New Zealand students, particularly Māori and Pasifika, the sociocultural contexts of schools have not been conducive to learning. Bishop and Glynn (1999) argue that mainstream classrooms in New Zealand have generally alienated Māori learners because the sociocultural context has been one where what counts as knowledge is determined by the teacher and the students are required to leave their own knowledge behind when they enter the classroom. The Ministry of Education (2014a) states that underachievement of Pasifika students has frequently been attributed to deficit thinking and subtractive views of bilingualism in schools.

There are a number of sociocultural perspectives regarding culture, race and learning that are particularly pertinent to this study. It is argued that some aspects have the potential to develop researchers' and educators' understanding of schooling, race and culture. Using multiple levels of analysis, including micro- and macro-level processes requires examining global processes involving social and racial categories and analysing how they connect with group or individual goal-oriented behaviour, and then reorganising the categories. Bringing cultural practices to the forefront as the unit of analysis enables conventions and artefacts, cultural expectations and norms and community-led organisation to become the focus. Artefacts (especially ideational artefacts) and tools mediate thought, activity and learning. Ideational artefacts have developed from the cultural past, continue to convey meaning in the present and will continue into the future.

Through joint social activity, processes of race and culture occur at multiple levels (Nasir & Hand, 2006).

Research indicates that where the sociocultural environment is one that values and includes Māori and Pasifika languages and cultures, students are predisposed to more successful outcomes (Bevan-Brown, 2011a; Macfarlane et al., 2014; Ministry of Education, 2014a). When this occurs cultural practices are brought to the forefront, artefacts convey meaning, and mediate learning. Bishop and Glynn (1999) believe that relationships in the classroom must be about power sharing and the sociocultural context must be one in which all learners can utilise different ways of learning and can bring who they are and what they know into the classroom interactions and relationships. In this way classroom relationships between the teacher and students will be a joint social activity enabling multilevelled processes of race and culture to occur. Nasir and Hand (2006) reason: “As individuals form and reform themselves and their relations within and across communities, they gain (and lose) access to different sets of practices and roles, which according to the socio-cultural perspective, constitutes new learning” (p. 467). Sociocultural perspectives in general are not simply about learning, but concern the transformation of the individual. Identity is situated within individuals and groups and impacted on by their sociocultural worlds.

### **Narrative Inquiry**

Trahar (2009) posits:

Narrative inquiry is based firmly in the premise that, as human beings, we come to understand and give meaning to our lives through story...But narrative inquiry is more than the uncritical gathering of stories. Narrative inquirers strive to attend to the ways in which a story is constructed, for whom and why, as well as the cultural discourses it draws upon. (p. 2)

Narrative inquiry provides an effective methodology for examining the sociocultural worlds of participants in this study.

Narrative inquiry is particularly suited to investigating the research questions, for several reasons. First, it is a distinct form of discourse involving retrospective meaning making, communicating the narrator's point of view, and focusing on the unique nature of each human action. Second, narratives equate to verbal actions, explaining, informing, entertaining, defending, confirming, complaining or challenging the status quo. Third, social circumstances and resources both enable and constrain narratives. Fourth, narratives are socially situated and interactive performances, occurring in a particular setting, for a particular audience, and a particular purpose. Finally, researchers themselves are narrators developing interpretations and publishing their ideas about the narratives of others (Chase, 2005).

In this study, the interviewees were all involved in retrospective meaning making, expressing their unique points-of-view. They were primarily involved in the verbal actions of explaining and informing, but at times also entertained, confirmed, complained and challenged the status quo. The intersection of interviewees' and my sociocultural backgrounds is likely to have either enabled or constrained narratives. Because all narratives occurred face-to-face they were all interactive and socially situated. Subsequent to collecting the narratives, I, as the researcher, interpreted and narrated my ideas about the narratives of interviewees. All of these dimensions of narrative inquiry enabled data related to the research questions to be gleaned, such that a clear picture emerged of what elements had contributed to the academic success of this cohort of gifted and talented Māori and Pasifika students.

### **Purpose of this study**

This study is opportune given the government's recent and current focus on raising the achievement of Māori and Pasifika students. Its purpose is to investigate the lived experiences of Māori and Pasifika boys whose academic success in the context of two boys' secondary schools resulted in their selection to participate in GATE programmes. The aim is to research their stories in order to help inform policies, procedures and practices related to the identification and nurture of talent amongst gifted and talented Māori and Pasifika boys. The

perspectives of the boys, their parents and teaching staff are deemed important in order to identify the reasons for the students' success. Their perspectives on how well their schools had provided for their intellectual, cultural and emotional needs are significant to this investigation. As outlined in Chapter Four, the primary methodology utilised in this study was narrative inquiry. The main means for gathering data were semi-structured individual and focus group interviews, but data were also gathered via questionnaires and classroom observations.

### **Outline of chapters**

The meaningful examination of elements associated with the academic success of Māori and Pasifika secondary school boys requires an understanding of key issues in the literature. Chapter Two summarises the literature in areas that relate to gifted and talented boys. Conceptions, definitions and characteristics of giftedness and talent are all explored because of their relevance to the identification and nurturing of giftedness and talent. Finally, the needs of gifted and talented boys, and the curriculum and pedagogy that are pertinent for them as gifted and talented learners are then investigated.

The review then examines educational issues of specific significance to students from minority cultures in Chapter Three. Conceptions, identification, programme provision and pedagogy are re-examined as they pertain to students from minority cultures. The chapter concludes by exploring the issue of racial-ethnic identity.

Chapter Four outlines the methodology utilised in this study. This includes discussion of issues related to insider-outsider research, the rationale for using narrative inquiry as the primary methodology, and its links to methodologies appropriate to Māori and Pasifika participants. The chapter also explains how participants were selected.

In Chapter Five, the Koru Toru Model<sup>23</sup> is introduced as an integrating model for all the findings outlined in the following three chapters. Next, the first finding

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<sup>23</sup> Three koru. The koru is a loop or spiral pattern exemplified by a young fern frond.

focusing on the influence of whānau on the achievement of gifted and talented Māori and Pasifika students is presented and then discussed.

The second finding and related discussion are presented in Chapter Six. The four most dominant intrapersonal characteristics are examined.

Chapter Seven introduces the Mangō Pare<sup>24</sup> Model as a graphic means of collating and summarising the findings related to the influence of schools and teachers on gifted and talented Māori and Pasifika student achievement. The model identifies four significant strands of influence emerging from the study.

In Chapter Eight, the findings and discussion are summarised, limitations of the study are identified, and the study's conclusion is drawn. The summary includes a review of the key findings on the influence of the environmental catalysts of whānau, teachers and schools on achievement as well as the impact of intrapersonal qualities. In the conclusion, the implications of the research are identified for educators who work with gifted and talented Māori and Pasifika secondary school boys as well as for whānau. Suggestions for further research are also provided.

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<sup>24</sup> Hammerhead shark

## **Chapter Two: Literature Review – Pertinent issues related to the identification and nurture of talent in gifted and talented boys**

A significant amount of literature relates to the identification and nurturing of giftedness and talent (e.g. Ministry of Education, 2012a; Piirto, 2007; Sternberg, 2004). While there is no universally agreed definition of what it means to be gifted or talented, there is a broad body of literature that provides criteria for identifying the traits that enable individuals and groups to be recognised for their exceptionality in a range of domains. Conceptions about what it means to be gifted and talented have broadened rather than narrowed over time. This chapter of the literature review begins with the challenging issue of definition, and the associated conceptions of giftedness and talent, which are applicable to the students who are the focus of this study. Defining giftedness and talent and understanding the associated conceptions are important to the identification and subsequent implications around nurturing giftedness and talent.

As this study focuses upon boys, the second major focus of this chapter investigates issues related to both the general and school-based education of gifted and talented boys. The sociocultural settings in which gifted and talented boys in the 21<sup>st</sup> century are being raised provide particular challenges for both parents and educators. The challenges related to societal paradigms, the education system, family situations and personal issues all affect the extent to which gifts and talents are identified, nurtured and developed (Miller, 2011).

A more detailed review of literature, based upon the three themes follows, although it is acknowledged this chapter cannot do justice to the entire corpus of literature relevant to these three themes.

### **Conceptions, definitions and characteristics of giftedness and talent**

#### **Unitary views of intelligence**

For centuries different cultures have developed their own processes for identifying and nurturing giftedness and talent. Amongst the gifts and talents that have been

traditionally identified are general intellectual and specific academic aptitudes. To some extent the development of today's understandings of giftedness and talent in the western world began with the work of Sir Francis Galton (1869, 1883) on human intelligence. He postulated that intelligence was based on psychophysical abilities and was hereditary in nature. Galton's initial interest in studying intelligence was derived from observation of the "dispositions and achievements of his contemporaries" (Galton, 1869, p. v), and his surprise at how closely their achievements matched the abilities of their parents. This aroused his curiosity about whether the genius of eminent people was linked to their heredity. As a result he was motivated to research the lineage of approximately 400 eminent men from over 2000 years of history, as well as more recent eminent Englishmen whose immediate descendants were still alive at the time. In his study, Galton concluded that genius was derived primarily from an individual's heredity. Although he acknowledged that social influences, education and training affected the extent to which ability would develop, Galton was convinced that heredity was the dominant factor. While the individuals he studied were not described by him as gifted, his work set the stage for such individuals to later be identified and described in this way.

Unlike Galton, Binet (Binet & Simon, 1916) did not view psychophysical abilities as the key to intelligence but considered mental judgement was the basis for intelligence. It was his view that this judgement was able to be shown through direction, adaptation and criticism. Binet and his colleague, Theodore Simon developed the Binet - Simon scale to sort 'normal' learners from those who were 'retarded' (terms that were used at the time) in an educational setting. Binet considered that intellect could be improved through better social conditions and more individualised instruction.

Terman (Terman, 1925; Terman, Berks & Jensen, 1930; Terman & Oden, 1947, 1959) built on the work of Binet and Simon and designed the first version of what are now called the Stanford-Binet Intelligence Scales. In 1921 he began the first longitudinal study on intelligence. The initial participants in the research were a group of 1528 children of an average age of 12 years, all with an Intelligence Quotient (IQ) in excess of 135 and a group average of 147 based on data gathered

from the Stanford-Binet intelligence test. At the time Terman began his research, the general perception of an intellectually gifted young person was a: “bespectacled, frail youngster, ill at ease socially, lost in a world of books and lofty thoughts, usually isolated in some corner tenuously holding on to sanity” (Clark, 2008, p. 32). Terman challenged this widely held stereotype reporting that children with “advanced intelligence” were usually superior psychologically, emotionally, physically and socially in comparison to other children. He viewed giftedness and superior intelligence as synonymous and believed intelligence, and therefore giftedness, could be measured through the use of intelligence tests, in this way justifying his use of the Stanford-Binet test for measuring intellect. Where his work aligned with Galton was the shared belief that intelligence was inherited from an individual’s forebears and that intelligence was largely equated with cognitive ability.

Spearman (1927), a contemporary of Terman, is generally considered to have been the first to use factor analysis to study intelligence. His theory postulated that intelligence is influenced by two factors: *g* – general intelligence and *s* – specific intelligence. Spearman concluded that all cognitive performance is underpinned by the general and quantitative factor that he called *g* and this factor permeates all tests of mental ability. He claimed that this factor is fixed firmly and deeply in the subconscious and that evidence of intelligence is sourced from *g*. Spearman (1927) found that *g*: “showed itself to be involved in all operations of educative nature....It was found to be equally concerned with the two general dimensions of ability, clearness and speed” (pp. 411-412). In contrast to *g*, *s* was a group of specific factors, each only involved in one type of test of mental ability. Initially Spearman’s notion of the factors of *g* and *s* developed through observation which was later confirmed when tested mathematically. As a result he concluded that all abilities were related to these two factors. Spearman considered IQ tests would test both *g* and *s*, the *g* factor being common to all IQ tests and the *s* factor being distinctive to each individual test. Sternberg, Jarvin and Grigorenko (2011) consider that Spearman, “may have been the earliest serious cognitive theorist of intelligence” (p. 59). If Spearman’s theory is accepted, a gifted individual could be defined as one who is superior in general intelligence. This was the view of Terman and Oden (1959) who were convinced that the ability to achieve at a

superior level was dependent on an individual having a high level of Spearman's *g*. This thinking has influenced the identification of gifted students in the United States through to the present time, with Davis, Rimm and Siegle (2011) revealing that admission to some programmes for the gifted and talented is based completely on IQ scores.

### **Pluralised views of intelligence**

In contrast to Terman's and Spearman's theories however, several theorists later emerged whom Piirto (2007) terms 'splitters'. They had a fundamentally different view of intelligence to those who believed in the primacy of the *g* factor (or the 'lumpers') who preceded them. The splitters had a pluralised, multifaceted view of intelligence. They believed that intelligence is significantly influenced by one's sociocultural experiences. As such, they were critical of the heavy dependence on IQ tests to determine intelligence. The work of the splitters led to a more broadly based notion of giftedness.

The concept of intelligence began to broaden as a result of the work of Thurstone (1938) who challenged Spearman's theory that all cognitive performance is related to *g*. Through factor analysis, he considered that the basis of intelligence was not a single factor but originated in seven factors which he termed "primary mental abilities" (p. 1). These were: verbal fluency, verbal comprehension, inductive reasoning, number, spatial visualisation, perceptual speed, and memory. Thurstone asserted that these mental abilities were inter-related and related to *g* as well. He surmised that any individual ability or combination of abilities could imply intelligence or giftedness.

In 1959 the notion of IQ as the sole, or even as the primary indicator of intelligence, received its most serious challenge with Guilford's (1959) first publication of the Structure-of-Intellect Model. His work was modified over time so that the model encompassed 180 different skill areas, expanding upon the 120 different domains originally identified (Guilford, 1988). These areas included a variety of skills related to creativity, signalling its importance as a component of intelligence. Arguably, Guilford's (1959, 1967, 1988) Structure-of-Intellect

Model is the most overarching and complex view of intelligence yet to be developed. The comprehensive and complex nature of the model meant it incorporated a wide range of indicators for intelligence that were outside the scope of any IQ test. From the time it was first published the model posed a problem for those who considered that intelligence was unitary in nature and that an IQ test was an effective means of measuring intelligence. What Guilford's model proposed was that IQ tests only test for a narrow range of abilities that can be misconstrued as the only elements of intelligence. He proposed that most of what constitutes intelligence, and in fact giftedness, can never be solely measured by an IQ test. Although this was radically different from Spearman's view of intelligence, like Spearman's theory, Guilford's Model had an explicit cognitive aspect.

Although Sternberg viewed intelligence in a less complex manner than Guilford, he has in recent years been one of the most prolific writers on the subject of intelligence and has developed several theories to elucidate its elements. Through his theories, the notions of giftedness and intelligence have been more explicitly linked than was evident with previous researchers. One of these theories is his triarchic theory of successful intelligence (Sternberg, 1985, 2000a) which identifies three abilities and explains how they are demonstrated. Memory-analytic ability involves learning, comparing, analysing, evaluating and judging. Creative-synthetic ability includes producing novel and superior quality ideas in any domain in addition to interpreting ordinary situations in new and unusual ways. Practical-contextual ability enables people to succeed in their every-day environment, whether at work or at home. Sternberg's (2000b) definition and explanation of successful intelligence is:

The ability to achieve success in life, given one's personal standards, within one's sociocultural context. One's ability to achieve success depends on one's capitalizing on one's strengths and compensating for one's weaknesses through a balance of analytical, creative and practical abilities in order to shape and select environments. Gifted people do these things at a higher level than do others. (p. 4)

Sternberg reasons that the abilities people show within their sociocultural contexts may be unrelated to how they perform in intelligence tests. His theory of successful intelligence brought to the fore defects in a view of intelligence that places too much emphasis upon IQ test scores and related constructs. He argues that the child, who repairs electronic devices, begins a business or persuades others to his/her viewpoint can be gifted even if his/her IQ test scores are not of the predetermined level to indicate giftedness. In fact, such a child has strength in practical-contextual ability, and may well have strengths in memory-analytic ability and/or creative-synthetic ability as well.

Probably even more influential in New Zealand than the work of Sternberg was the dissemination of Gardner's (1983, 1993, 1999) Multiple Intelligences (MI) theory. His studies in neuropsychology led him to embracing the view of the human mind and brain known as modularity. This paved the way for the development of MI theory. When first mooted it was a radical new approach to thinking about human intelligence. Gardner postulated that there are multiple intelligences, each with its own individual indicators. MI theory includes a range of areas of ability valued by a diverse range of cultures and ethnicities. There were originally seven intelligences identified by Gardner in 1983 but an additional intelligence was added in 1999. These intelligences are: linguistic, logical-mathematical, spatial, musical, bodily-kinaesthetic, intrapersonal, interpersonal, and naturalist.

Although Gardner (1999) discounts the notion of spiritual intelligence and views it as a type of what he deems the 'possible' existential intelligence, his description of existential intelligence aligns closely with what Sisk and Torrance (2001) describe as spiritual intelligence. Spiritual intelligence is often referred to by indigenous groups as part of their definition of giftedness and talent, and omitting reference to it effectively eliminates recognition of a key value within indigenous societies. This is reflected in the work of Bevan-Brown (2011b) which outlines how spiritual intelligence is integral to how Māori, Navajo and Australian aboriginals view giftedness. Indigenous views of spiritual intelligence are examined further in Chapter Three.

There are common links in the understandings of high intelligence and giftedness in the theories of Guilford, Sternberg and Gardner. All include practical-contextual factors and make observations about the ways these factors are shown through gifted behaviours and all contribute to a broader conception of giftedness. Examples of this are individuals identified by Sternberg as having practical-contextual abilities who are able to succeed in their every-day environments. They may, for example, have Gardner's naturalist intelligence and be able to understand how to use plants for herbal cures. In terms of the skills related to creativity identified by Guilford, they may be able to think divergently and be capable of adapting the herbal cures for specific individual's needs. None of these abilities would be testable with an IQ test but all are evidence of intelligence. However, students who have advanced cognitive ability in relation to symbolic content (Guilford), have strong memory-analytic ability (Sternberg) or strength in logical-mathematical or linguistic intelligence (Gardner), are likely to score highly in IQ tests, and therefore be considered intellectually gifted.

Several theorists took a position between those of the aforementioned lumpers and splitters. One of the most influential was Renzulli (1998) whose work also found favour in New Zealand. He considers that to identify individuals as gifted is counterproductive to efforts to identify and provide suitable programmes for some students. Renzulli believes the focus instead should be on gifted behaviours. From studying creative-productive adults he found "a relatively well-defined set of three interlocking clusters of traits" (Renzulli, 1998, p. 7). These traits are portrayed in the three-ring conception of giftedness he developed as a graphic representation of what constitutes gifted behaviours. The three rings are above average ability, task commitment, and creativity. In the diagrammatic representation of his model the rings are embedded on a hound's-tooth background which represents the personality and environmental factors that influence giftedness. Renzulli claims that for an individual to be considered as gifted, all three gifted behaviours must be evident (Renzulli, 1998). It is interesting to speculate as to how many of Terman's study participants with high IQs would not have been considered to be gifted by Renzulli because of a lack of task commitment and/or creativity. It would also be interesting to consider how many individuals with extremely high

IQ scores in today's world might be not counted as gifted because at the time of testing they were not task committed or demonstrating creativity.

While there are many other theories and models of giftedness and talent that could be considered there is one in particular that provides a useful lens relevant to this study. Gagné's (2010) Differentiated Model of Giftedness and Talent (DMGT) (Figure 1, following) is considered particularly pertinent because it incorporates the environmental and intrapersonal catalysts as well as the chance component that are integral to turning gifts into talents. As discussed in Chapters Five, Six and Seven, participants in this study identified these catalysts and the chance component as elements contributing to academic success. The DMGT also provides a useful tool to assist in classifying the data gathered in the course of research.

The DMGT shows that for gifts to be developed into talents it is necessary for the developmental process, catalysts and chance to interact with an individual's gifts. Gagné argues that the developmental process includes both formal and informal learning and practising what has been learned. This process provides the link between giftedness or natural abilities and talent or systematically developed skills. Gagné identifies two catalysts (environmental and intrapersonal) that act on the developmental process to turn gifts into talents. What he terms 'chance', acts on the two catalysts and the developmental process as well as on the student's natural abilities. The nature of relationships within the whānau, the impact of teachers, and schools' policies and practices, and the influence of significant others outside of the whānau are all primarily environmental catalysts. Intrapersonal elements include physical factors, mental traits, awareness, motivation and volition. There are many chance factors that influence student achievement including the socio-economic status and educational focus of the family, the hereditary characteristics that emerge in each individual, the schools which students attend and the particular teachers they encounter on their journey through the schooling system (Gagné, 2003, 2008, 2010).

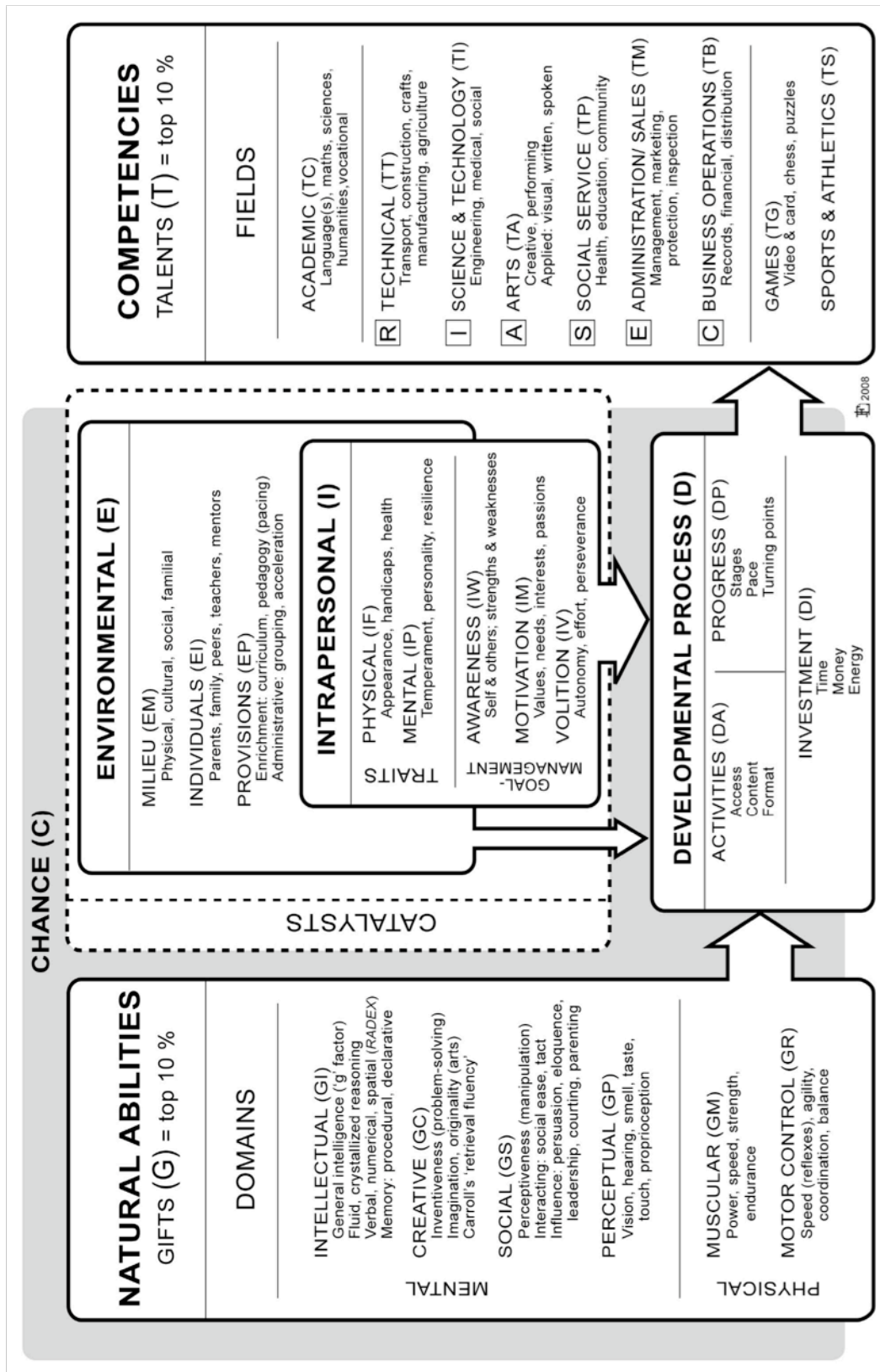


Figure 1: Differentiated Model of Giftedness and Talent (Gagné, 2010). (Reprinted with permission)

For many indigenous people the notion of chance is inconsistent with their world view. They would view what Gagné terms ‘chance’ factors as being derived from divine activity. For example, Begay and Maker (2007) explain that the Dine’ (Navajo) view exceptionality as foreordained by the holy people and that prior to birth each individual is endowed with a gift. In explaining a Māori view of the origin of gifts, Bevan-Brown (2011a) states: “People who had special abilities were considered to have received their expertise as a ‘gift’ from the gods” (p. 91). Nonetheless, Gagné’s model is particularly applicable given this thesis focuses on giftedness that is observable in the form of talents in the academic field. It also provides scope for making links to Māori and Pasifika conceptions of giftedness and talent with the proviso that chance needs to be modified and the influence of the divine included.

### **Education sector developments**

The conceptions of giftedness and talent expressed by educational theorists impacted on definitions and conceptions developed by government agencies from the 1970s onwards. Prior to the early 1970s in the United States, legislators, educators and parents had debated how to effectively provide for gifted students in the context of a public education system based on an egalitarian philosophy. Research indicated that talented children were achieving significantly below their potential, this being particularly evident in children from minority groups. In 1969 the United States Congress added section 806 to Public Law 91-230 requiring the Commissioner of Education to undertake a study to determine the necessity and usefulness of special education assistance programmes in meeting the needs of gifted and talented children. Commissioner Marland was also required to ascertain what Federal assistance programmes were in place to meet the needs of gifted and talented children, how these programmes could be made more effective, and what new programmes might be needed (Marland, 1972). The Marland Report (Marland, 1972) brought the issue of provision for gifted and talented students in the United States to the attention of both politicians and educators. There had been no previous federal government definition of giftedness and talent or recognition of the need of these students for differentiated programmes. The report stated:

Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated programmes and services beyond those normally provided by the regular school programme in order to realize their contribution to self and society. (p. 5)

Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas:

- General intellectual aptitude;
- Specific academic aptitude;
- Creative and productive thinking;
- Leadership ability;
- Visual and performing arts; and
- Psychomotor ability. (p.5)

This report was of great significance because it provided a clear definition which recognised both g and other aspects of giftedness that may be evident in students. It also recognised the need for differentiated programming.

Forty years later, the only real change to the United States Department of Education definition of giftedness and talent, apart from rewording the same concepts, was to delete psychomotor ability from the definition. According to Davis et al. (2011), the reason for the change is that psychomotor ability is subsumed under the word 'artistic' and students gifted in athletics have their needs well provided for outside of programmes for the gifted and talented. The current definition of the United States Department of Education (2012) states:

The term gifted and talented, when used with respect to students, children or youth, means students, children or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services or activities not ordinarily provided by the school in order to fully develop those capabilities. (p. 3)

Rather than developing a definition for the whole country, Riley et al. (2004) comment that in New Zealand the Ministry of Education preferred to develop a set of guiding principles that communities could utilise in developing their own definitions. This was in appreciation of the differing cultural and community understandings that are evident. In 2002 the Ministry of Education released a policy statement which included recognition of the differing cultural and community understandings of giftedness and talent within the country. It also acknowledged the exceptional abilities of gifted and talented learners in relation to most other learners, and their potential to perform at an outstanding level. Furthermore, their significantly different learning needs were acknowledged resulting in the need for different learning opportunities, and possibly the need for social and emotional support in order to achieve highly. The exceptional abilities were identified by the Ministry of Education (2012a) as relating to general intellect, academics, creativity, culture, visual and performing arts, physical abilities, social and leadership skills, and emotional and spiritual qualities. What is significant about the Ministry of Education's identification of special abilities is that it is much broader than the definition of the United States Department of Education (2012). Culture has been specifically identified, the psychomotor abilities, which have been removed from the United States Department of Education's current definition, have been included under the umbrella of physical abilities, and emotional and spiritual qualities have been included. When considering the needs of Māori and Pasifika gifted students the cultural, emotional and spiritual qualities are particularly pertinent. While the range of abilities identified by the Ministry of Education is broad and inclusive of elements valued by Māori and Pasifika, the question arises as to why Māori and Pasifika students are not identified for programmes for the gifted and talented in greater numbers. A partial answer could be found in the Education Review Office report (2008) showing that 60% of New Zealand schools had very limited evidence of incorporating Māori concepts in "the school's processes for defining and identifying giftedness and talent" (p. 67). Furthermore 64% had very limited evidence of incorporating multicultural concepts.

### **The EHSAS project**

One of the first tasks of the EHSAS project in which School A and B were involved was for the project committee to develop an agreed upon definition of giftedness and talent. This was the subject of some debate before the following definition (School A, 2006) found favour. “Gifted and talented learners are defined as those who have outstanding abilities, have potential for high performance in our conventional academic subjects and who require differentiated programmes in order to nurture their talents and skills” (p. 4). The insertion of the phrase, “in our conventional academic subjects,” becomes in Chapter Seven, the subject of wider discussion in this study. The Milestone 1 Report (School A, 2006) explains its insertion thus: “The reason for inclusion of the ‘conventional academic subjects’ was to make it clear that the project (and funding) was to focus on the development of gifted and talented within the academic, school-based curriculum, and not extend into the parameters of sporting and co-curricular activities” (p. 4, 5). Thus, there was recognition that although giftedness and talent is wider than the definition, the project purpose and funding was to have a specific academic focus. The words: “in our conventional academic subjects,” were deleted from School A’s policy statement following the completion of the EHSAS project in December 2009.

Significantly, the cited definitions of educational authorities and schools recognise the diverse nature of giftedness and talent, incorporate potential as well as actual performance, and clearly state the need for differentiated programming for gifted and talented students.

### **Social and emotional aspects of giftedness and talent**

In addition to the intellectual, practical and creative aspects of giftedness, Hébert (2011) proposes that the social aspects of giftedness, in terms of peer relationships, become especially salient during the secondary-school years. Erikson (1968) argues that the adolescent years are a critical time in psychosocial development, and teens’ personal identity is shaped by asking and seeking to answer questions relating to heritage, purpose and destiny. He views this task as the most important challenge of adolescence. The social relationships with age-group peers may complicate this task. Davis et al. (2011) state that individuals may be unable to

find true intellectual peers and feel socially isolated as a result of not being able to find anyone else who appreciates their more adult interests and abilities. This may lead to teasing and ultimately attempts to mask abilities in order to win peer acceptance. Davis et al. (2011) argue: “Due to their social isolation, uniqueness, feelings of not being normal, and ability to self-analyze, many gifted youth experience severe identity problems regarding who they are and what they wish to become” (p. 452). In contrast to Davis et al., Silverman (1993a) argues that gifted young people are generally better socially adjusted than average students interacting with others in a more mature manner. They are also more likely to possess the personality characteristics which aid the building of positive relationships. However, Silverman does acknowledge that the extremely gifted may have difficulty in building positive peer relationships through a lack of likeminded peers. It seems that on occasion social relationships may be an issue for gifted teens, but in the absence of supporting research data it would be difficult to argue this is generally the case.

For gifted and talented adolescent students from minority cultures the issue of their racial-ethnic identity is likely to be a particularly pertinent aspect of developing their own personal identity. In addition to the issues of identity faced by gifted and talented students from majority cultures, they may be required to develop strategies for coping with stereotyping and racism in the school setting as well as wider society (Webber, 2011a). Racial-ethnic identity will be explored further in Chapter Three of this review. Because the adolescent age group is the focus of my study, awareness of the social aspects of giftedness relevant to them, is important.

In spite of the factors previously discussed that may impact negatively on gifted and talented students, Clark (2008) argues they generally have social-emotional characteristics which enable them to be better emotionally adjusted than are non-gifted children. In addition, they typically enjoy learning and challenge, are curious and persistent, and oriented towards mastery. She considers that in contrast to non-gifted learners they are characteristically more independent, less likely to conform to peer expectations or opinions, more assertive and more competitive. Frequently they show leadership and often become involved in

community projects and concerns. Furthermore, gifted and talented students prefer to associate with intellectual peers over their chronological-age peers. They are likely to enjoy the company and conversation of adults. In spite of the evidence that gifted and talented students are better emotionally adjusted than their non-gifted peers, this adjustment does not necessarily carry through to adulthood, particularly for the creatively gifted. For example, Kaufman (2000/2001) showed, through his study of Nobel and Pulitzer prizewinning authors, that they were significantly more likely to suffer from mental illness, alcoholism and be afflicted by personal tragedy. This raises the question of whether the nature of an individual's gifts and talents may affect his/her social and emotional wellbeing.

### **Summary**

Definitions and conceptions of giftedness and talent have broadened over time starting from a narrow focus on intellectual ability with the work of Galton (1869) and widening through the work of Thurstone (1938), Guilford (1959, 1967, 1988), Sternberg (1985, 2000a, 2000b), Gardner (1983, 1993, 1999), Gagné (2003, 2008, 2010), Renzulli (1998) and others. When the first definition of giftedness from the United States Office of Education was released in the Marland report (1972), the definition was broadly based and identified the need for differentiated programming for gifted and talented students. This set the pattern for the current United States Department of Education (2012) definition and the conception of the New Zealand Ministry of Education (2012a). Extending the United States' statement, the New Zealand statement identified culture, emotional and spiritual qualities and physical abilities as dimensions through which giftedness may be displayed. All of the abilities specified in the New Zealand statement are integral to the identity of gifted and talented students and influence the gifted behaviours they display. Ultimately, how schools and teachers identify and provide for gifted and talented students is strongly influenced by the conceptions of giftedness and talent that they hold.

### **Needs of gifted and talented boys**

The literature on gifted boys is not extensive but some important issues are evident nevertheless. This section explores the issues of identity, mentoring,

multipotentiality, advanced talent in a single domain, underachievement, family relationships, intrapersonal characteristics, and curriculum and pedagogy. Each of these is briefly discussed in turn in order to address the research questions.

### **Identity**

The issue of developing identity is relevant to all boys but there are also particular considerations for those who are gifted and talented. An important concern in developing identity is dealing with societal expectations and stereotyping in terms of discourses surrounding masculinity. Kerr and Cohn (2001) believe that along with boys in general, gifted and talented boys may feel pressured to comply with the 'Boy Code', the stereotypical behaviours society expects from boys. Added to this is the claim that gifted and talented individuals have greater emotional sensitivity (e. g., Dabrowski, 1967, 1972; Piechowski, 2003). Such sensitivity may cause internal conflict if boys try to subscribe to the code. Their advanced thinking abilities enable them to critique the superficiality of the Boy Code, at the same time as their inner selves may long to express authentic emotions and ideas although they may feel obliged to portray a tough and competitive exterior to their peers (Kerr & Cohn, 2001). Conversely, their advanced ability may act as a buffer against the assumptions and restrictions of this code. Winner (1996) argues that the independent thinking of gifted children enables them to resist the prevailing culture and focus on the development of their own talent. She further reasons: "Perhaps because gifted children reject mainstream values, they reject gender-stereotyped values as well" (Winner, 1996, p. 218). In fact, as Csikszentmihalyi, Rathunde and Whalen's (1993) study shows, gifted boys scored highly on measures of aesthetic values and sensitivity and did not adhere to the stereotypical male trait of displaying physical bravado. Winner (1996) and Csikszentmihalyi et al. (1993) indicate there are likely to be many gifted and talented boys who never feel any desire or compulsion to comply with the Boy Code. Others may have felt the pressure and desire to comply early in their school years but then have rejected the code for its superficiality and chosen to associate with peer groups that do not place emphasis on code compliance.

In contrast to the issue of Boy Code compliance another important aspect of identity that features in this study is the spiritual dimension. This was discussed in Ballam's (2013) research, where a significant minority of secondary school students from low socio-economic backgrounds identified the spiritual dimension as important to them. Fifteen of the 93 participants considered their faith or connection with a religious group contributed to their self-confidence and abilities and hence their sense of self. Pollack (2000) also found in his study of boys from diverse ethnicities that for many, the spiritual dimension contributed to emotional well-being and was a meaningful part of their identity. Spirituality has already been alluded to as a dimension of giftedness. This is of significance because for several of the Māori and Pasifika students interviewed for this study, the spiritual dimension seemed to be an important facet of their lives. For Māori this was likely to feature as part of the values and beliefs inculcated in them through their upbringing independent of any particular association with a church or religion. For Pasifika boys, the church was generally an important factor in their lives and a means through which their spirituality was expressed.

### **Mentoring**

Mentoring can play a significant part in the academic and personal development of gifted and talented boys including the development of their identity (Hébert, 2011). For instance, Kerr and Cohn (2001) claim a male mentor can be helpful in assisting boys to understand masculinity as well as in developing their own personal identity. They state:

One of the most important roles in the rites of passage in traditional cultures is the male mentor or sponsor – the one who teaches or supplements the parents' teaching of what it means to be a man. Without this male ally, the gifted man may flounder spiritually, may fail to develop his own unique masculine identity, and may never be sure of whom he is. (Kerr & Cohn, 2001, p. 322)

From this it would seem it can be beneficial for gifted boys to have a mentor attuned to their unique needs as gifted boys. Clasen and Clasen (2003) argue that for centuries, and across almost all cultures, mentoring has been a means by which

gifted and talented people have been educated. Some benefits outlined by Clasen and Clasen are the meeting of needs in domains of exceptional ability, the exploration and development of careers, and the development of potential. It is significant that Presidential Scholars<sup>25</sup> have had mentors assisting them in areas where passion and expertise exist. Scholars acknowledge the important influence of their mentors on their levels of achievement (Kerr & Cohn, 2001). Bloom's (1985) research of eminent people in the fields of music, art, athletics, mathematics and science also revealed that having someone discover and cultivate abilities early in life was critical to their later achievement. Bloom refers to those who provided tuition as teachers in the beginning stages of talent development and as master teachers in the latter years. It seems these teachers and master teachers had an understanding of how to nurture talent in much the same way as the mentors of Presidential Scholars.

### **Multipotentiality and advanced talent in a single domain**

One of the ironies of life at secondary school for a gifted boy with multipotentiality is that he can be very competent in a range of academic disciplines, achieving excellent results across the range in assessments and yet feel ambivalent or even negative about particular disciplines (Kerr & Cohn, 2001). Arnold (1994) claims this can have negative consequences for future study and career choices. She outlines how many academically able boys, with multipotentiality, made poor choices in respect of vocation choices, attracted by options that would bring status or money. As 26 year olds, she noted that although they had achieved their career aspirations to that point of their lives, they expressed disillusionment. Arnold considered these young men had been influenced by the 'careerism' and focus on material success characteristic of the Reagan era of the 1980s. The only positive, lasting solution, according to Kerr and Cohn (2001), is for boys to choose their careers based on their most cherished values. Moreover Rysiew, Shore and Leeb (1999) recommend counsellors assist gifted students with multipotentiality in their career choices by advising them that

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<sup>25</sup> "The U.S. Presidential Scholars Program was established in 1964, by executive order of the President, to recognize and honour some of our nation's most distinguished graduating high school seniors...Each year up to 141 students are named as Presidential Scholars, one of the nation's highest honors for high school students" (United States Department of Education, 2014, p. 1).

a career should be explored as a way of life or lifestyle rather than as a job or position. A boy who has an extraordinary talent in one particular field often has a different need to the boy with multipotentiality. Kerr and Cohn (2001) advise that what the boy with an extraordinary ability in an individual field needs is a mentor who will nurture that talent through providing focused guidance. While multipotentiality and giftedness in a single domain are outside the scope of this thesis, they are identified in the literature as potential issues and may be of relevance for other studies.

### **Underachievement**

A further concern raised in the literature is the incidence of underachievement amongst gifted and talented boys. In the United States, it is estimated that between 18 and 25 per cent of high school students who do not graduate are gifted (Solorzano, 1983; Renzulli & Park, 2000). Because there is no agreement in the literature about what exactly constitutes underachievement it is difficult to develop a strategy to address the issue. On the one hand Rimm (1997) considers: “if students are not working to their ability they are underachieving” (p. 18). It seems under this definition that almost every student could be considered to be an underachiever. On the other hand, Reis and McCoach (2000) propose a definition that they acknowledge is imperfect but more specific: “Underachievers are students who exhibit a severe discrepancy between expected achievement (as measured by standardized achievement test scores or cognitive or intellectual ability assessments) and actual achievement (as measured by class grades and teacher evaluations)” (p. 157). While defining ‘underachievement’ appears problematic there is evidence this is an issue for many gifted boys. Clark (2008) claims that of particular concern for boys is that, typically their underachievement begins to become evident in the second year at school whereas underachievement is more likely to become evident in girls from their seventh year in school. Furthermore, for every year that passes in school, the difficulties caused by underachievement are likely to increase. In New Zealand, and some other countries, the Reading Recovery programme is an example of an intervention aimed at assisting six-year old children to catch up if they are perceived to not be achieving at the expected Reading level for their age. In New Zealand, Cowles

(2014) reports that in 2012, 63% of the students involved were boys and there was a 91% success rate in raising the performance of participating students to the expected level. This would seem to be a very successful programme in addressing underachievement. What it does not address is the underachieving gifted boy who may have the capability to be reading well in advance of others of his chronological age but is not working to that ability level. Such underachievement may occur across the full range of subjects taught at school.

By the time students are in the senior secondary school, the achievement gap between boys and girls is clearly evident in national assessment results. This is a major issue in New Zealand, as well as Australia, the United Kingdom and the United States and probably many other countries (Gargiulo, 2006; Ministry of Education, 2007b; New Zealand Qualifications Authority, 2014a, 2014b; Sax, 2007). The most recent statistics (New Zealand Qualifications Authority, 2014a) for 2013 reveal interesting data for participating students. While 75.2% of girls and 65.8% of boys gained the National Certificate in Educational Achievement (NCEA) Level 3 qualification of University Entrance<sup>26</sup>, the gap between the achievement of top students at Level 3 is narrower. At Level 3, 12.9% of girls and 9.1% of boys gained Excellence endorsements<sup>27</sup> (The Level 1 results were 22.1% for girls and 11.5% for boys). Furthermore, for New Zealand's most demanding examination, New Zealand Scholarship, a Level 4<sup>28</sup> qualification, 22% of boys' results received Scholarship grades and 20.8% of girls' results (although 6000 girls entered by comparison with 4963 boys). However, at the Outstanding Scholarship level there were 3.3% of the boys' results and 2.2% of the girls' results that were at this level. In addition, as with 2012, nine of New Zealand's 10 premier scholars, the best overall in the examination, were boys. These results suggest that the gap between genders for top achievers at the most senior level of the secondary school is minimal. However, what the data do not show are how many underachieving gifted boys have left school before the Year 13

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<sup>26</sup> In 2013 University Entrance required a minimum of: 14 credits in each of three approved subjects at Level 3 or higher, and 10 literacy credits (5 in reading and 5 in writing) in English or te reo Māori at Level 2 or higher, and 10 numeracy credits at Level 1 or higher.

<sup>27</sup> An Excellence endorsement required 50 or more credits at the Excellence level. A student would require Excellence credits in at least three subjects to gain this endorsement.

<sup>28</sup> Equivalent to first year at university.

examinations thus giving an impression that the narrowing of the gap in achievement between genders is more significant than it is in reality.

The tracking of students from the 2011 Year 11 cohort showed that 72.8% of girls and 65.8% of boys were retained at school to Year 13 (New Zealand Qualifications Authority, 2014a). The lower retention rate for boys will have affected the results to some extent. Of particular concern are achievement levels of Māori and Pasifika boys. The University Entrance results show 56.6% of Māori girls and 54% of Pasifika girls gaining the award. By comparison 48.6% of Māori boys and 39.2% of Pasifika boys were awarded University Entrance (New Zealand Qualifications Authority, 2014b). Nonetheless, there are some schools already successfully addressing the issues of boys' and Māori and Pasifika underachievement. An example of this is School B which was involved in this study. It is a decile<sup>29</sup> 2 school with a 55% Māori and 17% Pasifika roll. In 2009 62% of boys, 52% of Māori and 31% of Pasifika gained University Entrance. The 2013 University Entrance data show 79.3% of boys, 72.4% of Māori and 75% of Pasifika participants gained University Entrance. In 2010 School B began staff development through the Te Kotahitanga project (School B website, 2014). Another secondary school that has successfully addressed the issue of boys' and Māori achievement is Kerikeri High School. In 2014 the school received the Prime Minister's Education in Excellence Award for Excellence in Teaching and Learning in recognition of the improvement in Māori student achievement. The total roll of the school is 27% Māori. The Māori student pass rate for Level 2 of NCEA has moved from 28.6% in 2005 to 82.4 per cent in 2013. The boys' pass rate has moved from 47.9% in 2005 to 91.3% in 2013. A factor involved in the school's success is considered to be the school's involvement in the Te Kotahitanga project (de Graaf, 2014). In the New Zealand education system, Māori and Pasifika boys' underachievement remains a pressing concern that has implications which will be addressed further in Chapter Three.

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<sup>29</sup> "A decile is a 10% grouping, there are ten deciles and around 10% of schools are in one decile. A school's decile rating indicates the extent to which it draws its students from low socio-economic communities. Decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10% of schools with the lowest proportion of these students" (Ministry of Education, 2014b, p. 1).

The data in the preceding two paragraphs indicates the results for Year 13 participants in NCEA University Entrance and New Zealand Scholarship assessments. However, there are many Year 13 students in New Zealand schools who do not participate in the Level 3 University Entrance courses. For the first time in 2014, NZQA (New Zealand Qualifications Authority, 2014a) reported roll-based data for the entire Year 13 cohort, whether or not they were participants in University Entrance. These data show 56.8% of girls attaining University Entrance and 44.7% of boys. Furthermore, roll-based data showed 34.2% of Māori and 34.9% of Pasifika attaining University Entrance. A small number of elite scholars would have gained University Entrance before Year 13 but the great majority of those not completing the Level 3 qualification would be still completing their Level 2 qualification. The question arises as to whether participant data or roll-based data more accurately portrays how effective schools have been in raising students' achievement. It appears that prior to 2013 when roll-based data were not available, both the education sector and the public may have been misled as to how well students were achieving as a cohort. When considering the percentage of successful participants in a given school it would also be informative to know the percentage of nonparticipants in the cohort and their reasons for not participating. While the above data show a clear lag in the achievement of boys, Māori and Pasifika in University Entrance results, what is of particular relevance to this study, but is not known, is how many gifted and talented Māori and Pasifika boys are not gaining University Entrance. This warrants further research.

### **Family relationships**

Olszewski-Kubilius (2008) argues that the home environment can determine the extent to which a young person's potential ability is realised. Indeed, some literature argues that family influences are the pre-eminent or most potent factors influencing student achievement (Biddulph, Biddulph & Biddulph, 2003; Freeman, 2000; Henderson & Berla, 1994; Macfarlane, Webber, Cookson-Cox & McRae, 2014). As Keen outlined (2004), a family environment beneficial to gifted boys and girls, prioritises both spiritual and material investments, and models a

commitment to life-long learning and inquiry that is characterised by unconditional love.

Hébert (2011) claims a particular need for gifted and talented boys is for parents to be careful about avoiding stereotyping in terms of how they conceptualise masculinity. Kerr and Cohn (2001) warn that certain parenting patterns can inhibit the development of a gifted boy's identity. A pattern where parents do not provide sufficient time or guidance is likely to hinder identity development. In a similar way, a mother whose son becomes her confidante and emotional support, and a father who expects his son to fulfil his own unrealised dreams or ambitions both inhibit their sons' identity development.

For the gifted and talented Māori students involved in the study of Macfarlane et al. (2014), whānau were considered the greatest influence on students' academic success. However, research undertaken with Māori students of all abilities, as previously outlined in Chapter One, indicates that improving the achievement of Māori students in general in mainstream New Zealand secondary schools is most likely to occur through changing the practice of schools (Bishop et al., 2014). This research is discussed in Chapter Three.

### **Intrapersonal qualities**

In addition to the family environment, a gifted boy's own intrapersonal qualities are likely to impact on his achievement. Selberg (2009) studied performance patterns of highly-achieving secondary school students at West High School in Utah in the United States. Included in the information collected were data provided by 20 boys and 20 girls on their intrapersonal characteristics. These students had all been participants in the Salt Lake City District K-8 gifted education programme. In five different intrapersonal characteristics, the girls identified themselves as more likely to have each characteristic than the boys. Persistence featured for 45% of the girls and 10% of the boys; being an independent worker for 50% of the girls and 25% of the boys; hard work at things they liked doing for 45% of the girls and 30% of the boys; aspiring to get a university degree for 45% of the girls and 25% of the boys; and, curiosity about

how things work for 45% of the girls and 30% of the boys. There are limitations in the methodology of a study based solely on self-assessment because of the flaws implicit in self-reporting. Further, if the girls in general overestimated their intrapersonal characteristics and the boys underestimated theirs, the results would be meaningless. However, from the data, it appears that the boys in Selberg's study were not particularly motivated to achieve, in comparison to the girls.

This contrasts with Freeman's (2001) longitudinal study of gifted children undertaken over a period of 27 years. When asked the question, "What gives you the greatest pleasure?" 93 per cent of those who identified 'achievement' were boys. The 26 high-achieving boys in Ballam's (2013) study, including Māori and Pasifika boys, also appear to be much more hard working and persistent than those in Selberg's study, many commenting on their drive to achieve and the hard work associated with it. There are educational implications for other high schools and in other countries if Selberg's study were to be replicated. A wider sample than Selberg's study, Ballam's study and this study could reveal the extent to which intrapersonal traits generally affect the aspirations and achievement of both gifted and talented adolescent boys, and girls. Also, it is worth pondering how the results in Selberg's study may have changed if a third party such as a teacher or parent completed the exercise based on observation. Nonetheless, these intrapersonal qualities would seem important in order for learners to achieve. Despite Selberg's study's limitations, herein may lie part of the reason that boys in secondary schools generally achieve more poorly than girls. It is important however, to recognise that the school's ethos and its own particular culture impacts upon students' persistence, independence, work ethic, aspirations, curiosity and other intrapersonal characteristics.

### **Curriculum and pedagogy**

Most of the literature surrounding curriculum for gifted and talented learners is not specific to gifted and talented boys. Nonetheless, both gifted and talented boys and girls have similar atypical characteristics that mean the provision of appropriate curriculum and pedagogy is particularly pertinent to them. In order to provide appropriately for the gifted and talented and for their talent to be

developed, their atypical characteristics need to be understood. Csikszentmihalyi et al. (1993) found that talented teenage boys and girls were more similar to each other than average students of the same gender in a range of personality attributes. These included intellectual curiosity, sentience, the desire to excel, perseverance, and the preference to demonstrate leadership and control rather than being reactive. Kerr (1997) also recognised greater similarity between gifted girls and gifted boys than gifted girls and girls of average ability in terms of aspirations, attitudes and interests. Hence curriculum and pedagogy that is adapted to meet the needs of gifted and talented students in general is also likely to meet the needs of gifted and talented boys.

Csikszentmihalyi et al. (1993), in their study of talented teenagers, found that psychological complexity was the organising principle enabling them as researchers to establish meaning from the many factors influencing the development of talent. They stated:

Complexity – or the simultaneous presence of differentiating and integrating processes – distinguishes the personalities of talented teens, their families and their approach to learning... The concept of complexity helps synthesize tendencies that psychologists and educators have artificially set apart against each other: the need to achieve versus pure curiosity; narrow concentration versus openness and novelty; extrinsic versus intrinsic motivation. These and many other opposites are reconciled in talented people and their environment. (p. 242)

With their psychological complexity (Csikszentmihalyi et al., 1993), their rage to master, their ‘marching to their own drummer’ and their precocity (Winner, 1996), gifted and talented students are likely to achieve best in schools where the curriculum and pedagogy are differentiated to meet their needs. Where appropriate differentiation is not provided, gifted and talented students are at risk of becoming underachievers. Davis et al. (2011) reason that when the curriculum is unrewarding through being uninteresting, irrelevant or lacking in challenge, the intellectual and creative needs of gifted and talented students are unlikely to be met. They argue that this is particularly likely to be the case in a heterogeneous class setting. Furthermore, in such a setting, students who wish to question,

discuss, criticise and learn at levels beyond their peers may well be constrained from doing so with the consequence that they fail to develop perseverance or an internal locus of control. Davis et al., and Webb, Nemer and Zuniga (2002) view co-operative learning in a heterogeneous classroom as likely to be demotivating for gifted and talented students. However, Davis et al., and Piirto (2007) consider that co-operative learning in a homogeneous classroom is able to be aimed at a much more challenging level and therefore would be more motivating for gifted and talented students.

Many agree that in order to provide adequate challenge for gifted and talented students it is imperative that differentiation of the curriculum includes being given opportunities to learn at an accelerated rate (e.g., Colangelo, Assouline & Gross, 2004; Lee, Olszewski-Kublius & Peternel, 2010; Rogers, 2002). Townsend (2011) explains: “In essence, acceleration occurs when children are exposed to new content at an earlier age than other children or when they cover the same content in less time” (p. 255). He further states that in secondary schools the most common forms of acceleration are compacting the curriculum to enable the NCEA Level 1 qualification to be gained in Year 10 instead of Year 11 in one or two subjects, and providing students with the opportunity to study for the Cambridge International Examinations (CIE) and International Baccalaureate (IB). Compacting of the curriculum is sometimes promoted as an effective way of differentiating the curriculum for gifted and talented students (Renzulli & Reis, 1998; Rogers, 2007). Gross (1992) adds that for exceptionally and profoundly gifted students more radical acceleration is needed so that they are working three or more years ahead of their age peers in their areas of strength, which for some is in all subjects of the school curriculum.

In tandem with acceleration, gifted and talented students also need opportunities for enrichment. “In practice, enrichment occurs whenever children are engaged in additional activities or more demanding activities than their classmates when dealing with some curriculum area” (Townsend, 2011, p. 52). Typically in New Zealand, enrichment programmes are organised by the teacher to be undertaken within the classroom. However, in some cases enrichment is provided in the form of withdrawal programmes (Worn, 1989), such as those that utilise the

Enrichment Triad Model<sup>30</sup>. This is more common in primary schools. Withdrawal programmes have led to a diverse range of enrichment opportunities of variable quality being provided for students. It is argued that even interesting and enjoyable activities may not involve deep processing and therefore can be mere ‘busy work’ for the gifted and talented (Patrick, Bagel, Jeon & Townsend, 2005). Riley (2011) adds, differentiation is not simply about providing appropriate content but includes different processes, different products and different learning environments.

While providing a curriculum with appropriate challenge is important for the nurturing of talent, the nature of relationships between teachers and gifted and talented students is also important. The types of interactions that occur in classrooms relate directly to the pedagogy that is utilised. Hansen and Feldhusen (1994) investigated the classroom interactions between teachers of the gifted and gifted students. Teachers who were trained in the teaching of the gifted tended to be more effective because they utilised appropriate motivational techniques including the use of models and media in their teaching, emphasised thinking skills and creativity, covered the curriculum at a more rapid pace, provided for student-directed learning and as a result had superior student-teacher interactions. Piirto (2007) concurs with Hansen and Feldhusen’s view that there can be advantages for gifted and talented students in having teachers who have received professional development in the field as they are likely to be more supportive than untrained teachers. Piirto summarises what is needed for teachers of the gifted and talented arguing they “must like and be able to work with talented students, as well as with all students. As with all teachers, they must honor and affirm their students’ abilities”. (Piirto, 2007, p. 95)

Many scholars claim that the type of person the teacher is, and the pedagogy he or she uses, affects the quality of learning that occurs. The significance of positive teacher-student relationships in high-achieving students is outlined in the work of several researchers (Croft, 2003; Csikszentmihalyi et al., 1993; Horsley, 2009;

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<sup>30</sup> Developed by Renzulli (1977). Students with gifted potential work through three types of activities: Type 1 (General exploratory activities) including exposure to a variety of topics, events, disciplines, etc.; Type 2 (Group training activities) to develop a range of feeling and thinking processes; Type 3 (Individual and small group investigations of self-selected real problems).

Keen, 2004, Macfarlane et al., 2014). Croft argues that the teacher-student relationship has a greater impact on gifted students than on the nongifted. However, although Csikszentmihalyi et al. (1993) report the importance of teacher-student relationships in their study of gifted teenagers, Csikszentmihalyi (1996) found in a subsequent study of adults, that teachers had little or no impact on eminent creators according to their recollections. One of the focuses of this study is the influence of schools and teachers in identifying and nurturing talent. Although there is some literature in the field, the extent to which teachers influence the achievement of gifted and talented students requires further examination. The impact of teachers on student achievement in this study is addressed in Chapter Seven.

An important facet of pedagogy that may influence the building of relationships is what the teacher conveys to students in terms of understandings of gender. Keddie (2005) outlines how some simplistic understandings of gender have influenced classroom practice. These understandings include increasing the number of role models who are males, utilising teaching styles that are perceived as ‘masculine’, instituting single sex classes, implementing authoritarian disciplinary strategies and using non-interventionist or minimalist approaches. While conventional views may endorse these for boys, Keddie argues that such approaches are adopted without adequate reflection on their nature or potential impact. Connell (1995) also adds that such strategies are frequently based on a conventional, idealised, middle-class, white, heterosexual notion of masculinity. While Keddie considers increasing the number of male role models is simplistic, Kerr and Cohn (2001) argue it is important for gifted and talented adolescent boys to have male mentors as part of the development of their personal identity. These claims raise more questions about the degree to which student-teacher relationships influence student achievement and the formation of identity. This links to a further facet of pedagogy that may influence the building of relationships which is discussed in the next chapter; that of valuing and supporting students’ cultural distinctiveness.

A wide range of personal-social traits, intellectual-cognitive characteristics, and teaching strategies deemed to be important for teachers of the gifted and talented are identified in the literature, much of it syntheses of studies in the field. These

may be of relevance to all students and some could be considered particularly pertinent for teachers of the gifted and talented.

Numerous studies indicate many personal-social characteristics of teachers are highly valued by students. One of the attributes frequently mentioned by students is enthusiasm, which implies being passionate about the opportunity to nurture giftedness and talent and incorporating this passion into teaching situations and other interactions with students (e.g. Clark, 2008; Davis et al., 2011; Feldhusen, 1997; Heath, 1997; Vialle & Tischler, 2009). Having a sense of humour and fun that is conveyed to students through various interactions is also valued by many (e.g. Fraser, 2011; Heath, 1997; VanTassel-Baska, 2007; Vialle & Tischler, 2009). Humour and fun is a way empathy is shown but empathy above all is about building caring relationships. Empathy includes cultural empathy for students from diverse backgrounds and is a quality appreciated by students (e.g. Bevan-Brown, 2011a; Macfarlane et al., 2014; Vialle & Tischler, 2009). Teachers who have the aforementioned attributes are likely to be encouraging to students, a characteristic shown through affirmation and motivation (Davis et al., 2011, Macfarlane, 2010a; Piirto, 2007).

Many studies outline the importance of intellectual-cognitive characteristics in gaining the respect of students. The first characteristic is described in various ways, including being academic (Piirto, 2007), having high intelligence (Rogers, 2002) and having above average intelligence (Vialle & Tischler, 2009). Second, creativity is valued (Clark, 2008; Fraser, 2011; Vialle & Tischler, 2009). This characteristic is also described as being imaginative and innovative (Davis et al., 2011). Third, students appreciate teachers having in-depth knowledge in at least one field (e.g. Clark, 2008, Horsley, 2009; Piirto, 2007; Rogers, 2002; VanTassel-Baska, 2007; Vialle & Tischler, 2009). At primary school this could be in any of the range of subjects that are taught, but at secondary school level, it is important that this knowledge is demonstrable in the teacher's subject specialty or specialties.

In addition to the characteristics of teachers, there are certain teaching strategies that gifted and talented students find particularly valuable in the classroom.

Students are motivated by the teacher with high expectations of their achievement (e.g. Csikszentmihalyi et al., 1993; Davis et al., 2011; Macfarlane, 2010a; Vialle & Tischler, 2009). High expectations are likely to be conveyed to students by teachers who are well organised, demonstrated through careful planning (e.g. Davis et al., 2011; Macfarlane, 2010a; VanTassel-Baska, 2007; Vialle & Tischler, 2009). Of similar importance to being well organised is the teacher who avoids simply imparting information but acts as a facilitator of students' learning (e.g. Csikszentmihalyi et al., 1993; Davis et al., 2011; Ford, 2011; Macfarlane, 2010a; Vialle & Tischler, 2009). Finally, one of the significant ways student learning is facilitated is through teacher feedback about their work (Csikszentmihalyi et al., 1993; Macfarlane 2010a; Rogers, 2002).

As outlined above, creativity is one of the intellectual-cognitive characteristics gifted and talented students appreciate in their teachers. The implications for this are that creative behaviour, attitudes, thinking techniques and ideas are necessary elements to be fostered in the classroom. This is particularly pertinent for the New Zealand secondary school classroom because gifted and talented learners in particular, seem to become very assessment focused and highly value being able to provide the 'right answer'. The development of creativity can be a casualty of this mind-set. As a means of countering 'one-right-way' beliefs, *Future Problem Solving* and *Odyssey of the Mind* are two international competitive enrichment programmes that Davis et al. (2011) cite as particularly beneficial in terms of developing creative thinking. It is important to the learners themselves, and to society, to provide gifted and talented learners with the pedagogy that fosters their creativity. Fraser (2011) reasons:

For gifted and talented students it is imperative that they are given the opportunities to express and develop their creativity. As future leaders and innovators, their creativity is a precious resource, both as healthy, self-actualised people and for society, which may benefit from the contributions these students make now and in the future. The unprecedented social, moral, environmental and political problems the world faces require creative redefining, creative investigating and creative solutions. (pp. 171-172)

Aside from pedagogies for gifted students in general, the literature also outlines some pedagogies identified as specifically suited to boys. For example, Reichert and Hawley (2010) researched schools for boys in the United States, Canada, Great Britain, South Africa, Australia and New Zealand. Over 1000 teacher narratives and 1500 student narratives of students aged from 12 to 19 years were analysed. Reichert and Hawley found that boys of all ability levels, from all socio-economic strata, and from diverse ethnic groups and religions engage in classrooms when there is a partnership between the teacher and student in place, underpinned by the following three key principles.

The first principle, according to Reichert and Hawley (2010) is that boys are relational learners and “the establishment of an affective relationship is a precondition to successful teaching” (p. 38). Boys’ narratives shared how they had been motivated by the teacher’s humour, care and passion. Teachers of different styles built positive relationships with students. The highly-structured, ‘no-nonsense’, demanding teacher who was also ‘fair’ and conveyed that they wanted what was best for students along with the teacher who was viewed as kind and a friend, both built positive relationships.

The second principle is that boys elicit the kinds of teaching they need or at least seek. If the content of a lesson or the means of its delivery is problematic for boys they will clearly let the teacher know. The uses of passive inattention or diversionary tactics, including disruption of the lesson, are ways that boys commonly communicate that they are disengaging from the lesson. As a result, a teacher who is committed to engaging the boys in learning will change the content or manner of delivery and possibly the relational style. This flexibility and adaptability on the teacher’s part can lead to greater student engagement and therefore better learning.

The third principle is to bring what Reichert and Hawley (2010) called ‘transivity’ to the lesson. They define transivity as: “the capacity of some element of instruction – an element perhaps not normally associated with the lesson at hand – to arouse and hold student interest” (p. 39). This element may, for example, be a

motor activity, manipulation of materials, competition or some other form of interaction with others, or a surprise that engages or delights learners.

There are clear links between the pedagogy that is beneficial for boys and that which is valued by gifted and talented learners. Teachers of the gifted and talented who have the personal-social characteristics of enthusiasm, a sense of humour, empathy and are encouraging would in all likelihood also be successful teachers of boys in general. They establish an affective relationship and create receptivity towards learning in terms of the content and skills required. The teacher who uses strategies that facilitate student learning and provides effective feedback while indicating 'next steps' is appreciated by the gifted and talented and is less likely to have boys in general disengage from learning. Implied in being flexible and adaptable is the ability to explore different approaches in order to facilitate learning. Teachers who have the intellectual-cognitive characteristic of creativity not only appeal to gifted and talented students but are able to bring transivity to their lessons and thus are more likely to engage boys of all ability levels.

### **Summary**

Key issues identified in the literature, related to the lives of gifted boys, revolve around identity, mentoring, multipotentiality, advanced talent in a single domain, underachievement, family relationships, intrapersonal characteristics and, curriculum and pedagogy. These issues, although discussed individually, are interconnected. For the identity, academic, career, emotional and social needs of gifted boys to be effectively met, another person taking on a mentoring role, can be a particular help. This is likely to become particularly pertinent in adolescence, when identity and other life issues are generally heightened. One of these life issues is underachievement, which becomes particularly salient in adolescence when students are being assessed for the NCEA, CIE or other qualifications. Thus, it seems when gifted and talented boys have a positive mentoring relationship, a supportive family environment and have the intrapersonal characteristics associated with academic success, their talents are nurtured in a way that enhances achievement.

Gifted and talented boys need curriculum and pedagogy to be differentiated in order to provide for their learning needs. Differentiation aims to provide appropriate challenge to students through acceleration and enrichment. For many students, even more important than what is taught and how it is taught, is a positive teacher-student relationship which facilitates effective learning.

## **Chapter Three: Literature review - Educational issues pertinent to students from minoritised<sup>31</sup> cultures**

This chapter examines educational issues for students from indigenous groups and other minoritised cultures. These groups of students are particularly at risk of under-representation in programmes for gifted and talented students. Perceptions of giftedness and intelligence in the literature generally have their origins in Western European cultural norms which traditionally gave little or no recognition to the perceptions and experiences of minoritised groups. As a result there are significant implications which arise for individuals from minoritised cultures in terms of their learning.

While Western European conceptions of giftedness and talent have dominated for over a century, there is a growing body of literature which explores conceptions of giftedness and talent amongst indigenous peoples and other minoritised groups. Understanding and integrating these conceptions of giftedness and talent into identification processes, programme provision and pedagogy has become particularly salient driven by the changing demographics in Western countries. For example, Statistics New Zealand (2013), from the 2013 census data, reported 74% of the population were European, 14.9% Māori, 12% Asian and 7.4 % Pasifika (The total percentage is over 100 because many people identified with more than one ethnicity). However, 22% of the school population were Māori and 9.9% Pasifika. The Māori birth rate was 2.7 and the Pasifika birth rate 2.95 compared to the overall rate of 2. Māori and Pasifika students are therefore a growing sector of the school population and will continue to grow into the foreseeable future.

This section of the literature review explores indigenous and other minoritised group conceptions of what constitutes giftedness and talent, as well as issues related to identification, programme provision and pedagogy. In addition, because racial-ethnic identity has been linked to the achievement of students of minoritised

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<sup>31</sup> “To be minoritised one does not need to be in the numerical minority, only to be treated as if one’s position and perspective are of less worth, to be silenced or marginalized”. (Bishop et al., 2014, p. xiv)

cultures, this issue is also investigated. The foregoing issues are discussed in turn in the following section although it is acknowledged that the sections overlap.

### **Minoritised group conceptions of what constitutes giftedness and talent**

It was only in the latter part of the twentieth century that minority cultures' conceptions of giftedness and talent began to receive wider recognition in western literature. There has generally been a growing awareness that conceptions of giftedness and talent are culturally defined and interpreted, and what is valued in one culture may not be in another (e.g., Hernandez de Hahn, 2000; Jeltova & Grigorenko, 2005; Phillipson, 2007b). However, this developing awareness does not appear to have translated into the practice of many New Zealand Schools (Education Review Office, 2008). As a result, when schools identify students for programmes for the gifted and talented they do this on the basis of their conceptions which may not reflect the values held by minoritised cultures. In New Zealand, the understanding and recognition of diverse cultural conceptions of giftedness is particularly pertinent for Māori and Pasifika students who are significantly under-represented in programmes for the gifted (Keen, 2004; Riley et al., 2004). The Education Review Office report (2008) *Schools' provision for gifted and talented students: Good practice* indicated that the majority of New Zealand schools did not have a multicategory definition of giftedness and talent and generally relied on only one identification method. Furthermore, Webber (2011b) argues that Māori emotional, spiritual and cultural manifestations of giftedness have been overlooked and that as a consequence many Māori students who are gifted and talented in the community-focused, cultural or creative domains never have their potential or performance recognised.

Some researchers have examined Māori conceptions of giftedness and talent. Foremost amongst them, Bevan-Brown (2011a) examined biographies of famous Māori and supplemented this with informal interviews with 33 Māori adults. She stated that the most salient domains of giftedness for Māori in her study were: outstanding personal qualities and high moral values, service to others and, traditional knowledge and skills. It would seem highly improbable that any sample of Western European adults would have identified these as the strongest

indicators of giftedness. Other areas of giftedness identified by Bevan-Brown's participant group were abilities in various domains including language, intellectual, leadership, spiritual, artistic, physical and, miscellaneous. Webber (2011b) concurs with Bevan-Brown's participants' emphasis on outstanding personal qualities, service to others and traditional knowledge and skills stating: "To be considered 'a gifted Māori', not only must you be exceptional in a culturally valued area but you must also use your outstanding skill, ability or quality to help or serve others in some way" (p. 230). This also includes areas not related to the academic descriptors of knowledge such as wairuatanga<sup>32</sup>.

In addition to the traits identified as important for Māori giftedness, Bevan-Brown (2011a) also underlined the importance of group giftedness. She explained that Māori culture has a very strong group orientation and therefore identification of giftedness is more culturally appropriate when not confined to gifted individuals. Perceptions of giftedness that take cognisance of the possibility that giftedness may arise within group composition and interaction fit well with Māori conceptions of giftedness (Bevan-Brown, 1999, 2011a). Bevan-Brown commented that many teachers, when observing a talented musical group or reading an outstanding group science report, tend to focus on individual talents rather than acknowledging talent in a collective sense. The talent that belongs to the group as a whole is fostered within the group context. Macfarlane et al.'s (2014) study reinforced the notion of collective achievement. They stated that for a number of participants in their study, success was not simply about the individual but rather the entire whānau and community.

This group orientation is evident in some other cultures. For instance, in Japan achievement as part of a group is also particularly significant. In an interview, Bade (2010) conducted with Professor Nobutaka Matsumura, Matsumura commented: "For the Japanese, achieving in a group is respected, and an individual's giftedness is made the most of when contributing to a group effort." (para. 7) It seems that, the valuing of group giftedness also aligns well with the Dine' (Navajo) conception of giftedness. Begay and Maker (2007) assert that in

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<sup>32</sup> Spirituality

Dine' (Navajo) culture, to strive for individual distinction is contrary to the revered teachings of the deities, Changing Woman and White Shell Woman of Dawn. It is considered striving to achieve as an individual would upset the perfect balance, harmony and orderliness of the environment and Dine' children who show exceptionality are repeatedly reminded that they live in an interdependent world. Unfortunately there has been very little research in the area of group giftedness despite the importance of the group context for these cultural groups.

Research with Pasifika peoples has some strong similarities to research with New Zealand Māori. The research shows that Pasifika place strong emphasis on language ability, traditional knowledge and skills, service to others and the spiritual dimension (Faaea-Semeatu, 2011; Miller, 2003). Miller (2003) conducted research into perceptions of giftedness in the Cook Islands Māori community both in Tokoroa, New Zealand and in Aitutaki, in the Cook Islands. It was noteworthy that in both contexts good memory was regarded as the most significant indicator of giftedness. Linked to this were strong emphases on good communication skills, excellent vocabulary and skill as an orator. These emphases are indicative of the way sociocultural aspects such as the strong oral tradition of the Cook Islands had a major influence on perceptions of giftedness both in Tokoroa and Aitutaki. A second group of traits highly valued as indicators of giftedness were in the performing arts – early development of skill in the performing arts, skill as a dancer, ability to lead in singing or dancing, and ability to harmonise when singing. Interestingly, this group of traits, while valued in both contexts, was significantly more highly valued by questionnaire respondents in Tokoroa. A third significant area related to the ability to bring the community together and to work for the benefit of others. A fourth important indicator of giftedness was good knowledge of the Bible. Although not considered as important as the foregoing characteristics, two related to cultural flexibility were identified as very notable by a sizeable minority. These were: “The ability to move freely in two worlds, fitting in with mainstream society but being in touch with cultural roots, [and] ability to interpret each of the two worlds we live in to the other” (Miller, 2003, p. 65). All of these features reflect the strong influence of social and cultural values.

The aspects of giftedness identified in Miller's (2003) study align with the findings of a further Pasifika study conducted at Rutherford High School in New Zealand. Faaea-Semeatu (2011) was a teacher involved in this Ministry of Education funded Talent Development Initiative (TDI) with a focus on gifted and talented Pasifika students. She reported that as a result of consultation with the parent community, the project developed cultural identifiers that indicated the conceptions of giftedness held by this Pasifika community. The cultural identifiers were: adaptability, memory, church affiliation, commitment to excellence, relationships, resilience, lineage/birth right, language fluency, leadership and representation.

In all four studies (Bevan-Brown, 2011a; Faaea-Semeatu, 2011; Miller, 2003; Webber, 2011c), language ability, service to others, traditional knowledge and skills, and the spiritual dimension were important indicators of giftedness. Language ability would arguably be universally recognised as an indicator of giftedness. However, it seems western cultures have generally ignored the other three indicators of giftedness. For example, these areas are not identified in the United States Department of Education (2012) definition of giftedness.

In addition to Māori and Pasifika cultures, other indigenous cultures also emphasise service to others, traditional knowledge and skills and the spiritual dimension as important aspects of giftedness. For example, with regard to service to others, in Malay culture benevolence is expected from leaders (Phillipson, 2007) and in Dine' culture altruism is considered to be a significant aspect of giftedness. (Begay & Maker, 2007) Other indigenous cultures also place high importance on traditional knowledge and skills. Mpofu, Ngara and Gudyana (2007) found the Shona of Central-Southern Africa, not only recognise 'schoolhouse' giftedness but also giftedness in the traditional skills of agriculture, the creative arts and traditional medicine as well as leadership and interpersonal relationships. Some other indigenous cultures consider there is a noteworthy connection between spirituality and giftedness. There is a strong link between the spiritual dimension and conceptions of giftedness amongst Australian aboriginals (Gibson & Vialle, 2007), Dine' (Begay & Maker, 2007), Shona (Mpofu et al., 2007), Thai (Anuruthwong, 2007) and Tagalog-speaking Filipino (Wong-

Fernandez & Bustos-Oroza, 2007) cultures. For the Tagalog-speaking Filipino, theocentrism is pivotal to their conception of giftedness much in the same way as it is central to Pasifika cultures. While aspects of language ability are traditionally assessed, measures of ability generally ignore service to others, traditional knowledge and skills, and the spiritual dimension. In the view of many indigenous cultures, such measures therefore ignore most of what actually constitutes giftedness.

The less inclusive conceptions of giftedness in the English-speaking Western world have tended to exclude notions of giftedness valued by indigenous and other minoritised cultures. Indeed, Sapon-Shevin (2003) claims that gifted education, by the very nature of how it is conceived, is elitist and advantages the children of white, privileged parents. The conceptions of giftedness that influence educators have led to the under-representation of students from minoritised groups in gifted programmes (Biddulph et al., 2003; Ford, 2011; Keen, 2004; Olszewski-Kubilius & Thomson, 2010; Riley et al., 2004). Not only have they been under-represented as a result of differing conceptions of giftedness, but Olszewski-Kubilius and Thomson (2010), outline how many students from minoritised groups in the United States have been under-represented in part because of the poverty in their home and school environments. Olszewski-Kubilius and Thomson (2010) comment on the school environment: “In many instances no gifted programs exist at all, high achievement of students goes unnoticed and unattended to, and the focus of human and other resources is completely on struggling students and preventing dropouts, drug abuse, and teen pregnancy” (p. 59). In contrast to the English-speaking Western world, it seems that for the Shona of Central-Southern Africa, children from situations of poverty are more likely to be identified as exceptionally gifted than those from situations of greater socio-economic advantage. Mpofu et al. (2007) comment:

The Shona consider people from the lower socioeconomic class more likely to achieve exceptional giftedness than those from the middle and upper socioeconomic class. They hold the belief that poverty is the mother of invention and that being poor trains a person in qualities for exceptionality such as resilience and perseverance. The Shona also believe that the spirits may favour the poor to protect them from complete

dehumanization and to bring to fruition the gifts they have for society. (p. 245)

With educators in the English-speaking Western World identifying comparatively few students from situations of poverty for gifted programmes, it is a challenge the way the Shona value poverty as instrumental in the development of creativity, resilience and perseverance. This raises the question of how the creativity, resilience and perseverance of Māori and Pasifika students, who are generally from lower socio-economic situations, might be recognised as indicators of giftedness.

Not everyone agrees that specific variations in cultural conceptions of giftedness should be considered. Some researchers consider that the IQ test is authoritative, transcending cultures and provides objective evidence of giftedness. In the light of this belief, they consider that differences in cultural conceptions of giftedness do not alter what constitutes intellectual giftedness (e.g. Hernstein & Murray, 1994; Jensen, 1998; Rushton & Jensen, 2005). However, Sternberg (2014) argues “what constitutes an appropriate test of intelligence may vary across cultures, such that cultural groups that do well on typical intelligence tests might perform rather poorly if the tests were instead invented and geared toward the adaptive demands of other cultures” (p. 210). Furthermore, many countries (New Zealand included) that highly value education, do not routinely administer IQ tests. Indeed, even in France, where the first IQ test was developed, it is rarely used. Nevertheless, Easter (2011) indicates that the majority of New Zealand secondary schools use standardised tests in conjunction with other data for determining class placements at the start of secondary schooling. Like IQ tests, these tests provide comparative standardised data about students based on achievement for their age. In addition to standardised tests, Easter states that many secondary schools receive data about student abilities from contributing primary and intermediate schools. Furthermore, it is increasingly common for schools to interview gifted and talented students and their parents prior to them being placed in special programmes.

## **Identification**

An important consideration to be explored in this thesis is why students from certain ethnic minority groups have been under-represented in programmes for the gifted and talented. Frasier, Garcia and Passow (1995) argue that there are three key reasons why minority ethnic groups are under-represented in these programmes. First, deficit-based paradigms lead to the tendency to focus on perceived deficits of students from minority ethnic groups meaning that the strengths of these students are masked and remain unrecognised. Second, selective referrals for programmes occur because of the inadequacy of teacher knowledge about students from minority cultures. This, in turn influences teacher attitudes, leading to fewer referrals. Third, there is the bias of tests with standardised tests being unfair to many ethnic minorities because of reasons associated with culture and language.

In New Zealand, both Māori and Pacific Islands' students have been under-represented in programmes for the gifted (Keen, 2004; Riley, et al., 2004). As Keen (2004) indicated, this under-representation may be at least in part, the product of narrowly focused identification procedures that have led to selective referrals. He noted that the nature of procedures used, changed from primarily using observational approaches in early childhood centres to profiling and cumulative work samples in primary schools to formal standardised testing in secondary schools. The least used strategies were those that would have allowed for diversifying the approaches and sources of information such as peer or self-referral, whānau recommendation, parent nomination and networking between schools. It seems that networking between schools may have developed more in recent years with Easter (2011) stating numerous secondary schools consult with contributing primary and intermediate schools prior to the Year 9 intake of students being placed in classes.

Davis et al. (2011) outline how, in the American context, children from culturally diverse or low socio-economic backgrounds were rarely identified or described as gifted and were grossly under-represented in programmes for the gifted. This means that gifted and talented African American, Hispanic American and Native American children frequently had their abilities overlooked. Data from the United

States Department of Education for Civil Rights Elementary and Secondary School Data (2012) outlined in Chapter 1, showed a particular disparity in the representation of African American and Hispanic American students in programmes for the gifted and talented. According to Davis et al. (2011) under-representation appears to have largely resulted from minoritised students failing to achieve above the required IQ cut off scores, a highly selective means of identification.

Other literature also indicates that deficit-based paradigms (with the associated issues of acculturation and cultural capital), selective referrals and test bias are linked to under-representation (e.g., Elhoweris, 2008; Ford, 2011; Lidz & Macrine, 2001; Santiago, Gudiño, Baweja & Nadeem, 2014). It seems that these different facets are inter-related. For example, deficit-based paradigms and test bias are both linked to selective referrals. Some literature identifies deficit-based paradigms as a significant factor in the underachievement of students from minoritised cultures (e.g., Bishop et al, 2014; Ford, 2011; Walker, 2011). For instance, the majority western culture often considered there were deficiencies in indigenous peoples and other minority ethnic groups that affected their ability to be educated.

In New Zealand, deficit-based paradigms may have impacted negatively on identification procedures and effective programme provision for gifted and talented Māori students. Although their work was outside the field of gifted education, the work of Bishop (2005a) and Bishop and Glynn (1999) is pertinent to identification of gifted and talented Māori students because it provides an explanation for Māori underachievement in general. For example, Bishop (2005b) argues that Māori were pathologised through “the attempt to develop scientifically-based cultural deprivation theories to explain Māori underachievement in the mainstream education system” (p. 66). He suggests this pathologising practice arose as a result of the deficit thinking about Māori from 1840 to the present day. Bishop and Glynn (1999) argue that from the time the education system was established in New Zealand in the nineteenth century it aimed to marginalise Māori and resulted in social, political and economic subordination of Māori. They posit that in many respects the education system

was designed to promote Māori underachievement.

Bishop (2005b) clarifies the harmful effects of pathologising practices for Māori and the need for teachers to address this:

It is a matter of their critically reflecting on the imagery they hold about the teaching process as well as the metaphors they use to conceptualize the process. Simply put, if the imagery held of Māori children, or indeed of any children, or of interactive patterns is one of deficits and of pathologies, then teachers' principles and practices will reflect this and thus the educational crisis for minoritized children will be perpetuated. (p. 84)

This is of significance for all Māori students in mainstream schools, including gifted and talented Māori secondary school boys. Bishop and Glynn (1999) suggest a number of ways to address helping Māori achieve as Māori. Some of these include Māori using their own sense making and knowledge-generating processes and utilising the Treaty of Waitangi as a model and metaphor for successful power sharing and change. In these ways, Bishop and Glynn claim, the problems of marginalisation and underachievement amongst Māori can be addressed through culturally appropriate means. They consider, for this to occur in New Zealand secondary schools, a genuine dialogue regarding identification and programme provision would need to occur between each school and its Māori community. This could include consultation over schemes of work to ensure Māori sense making and knowledge-generating processes are included. Staff development would be an important part of the process with development provided by educators with expertise in Māori.

Te Kotahitanga was a project designed to counter the deficit thinking affecting Māori students. It focused on raising student achievement through culturally responsive pedagogy. It aimed to improve Māori student outcomes in particular, but also outcomes for non-Māori, in mainstream secondary school classrooms (Bishop et al., 2014). While the project was not focused on gifted and talented Māori students, its findings do remind educators of the insidious effects of deficit views and the impact these views have on identification and programme provision. Narratives from Māori secondary school students collated by Bishop

and Berryman (2006) and Bishop et al. (2014) provided important insights into their perspectives on the education system in New Zealand. Significantly, all the students identified the quality of their relationships with their teachers as the most important factor involved in their achievement in the classroom.

Deficit thinking also features in the Australian education system. Baldwin and Vialle (1998) state that for years the education provided for Australian Aboriginals was based on the belief that they were innately less intelligent than Australians of other ethnic groups. In a similar way Ogbu (2004) posits, “Historically, the overarching ideology of White Americans was that Black Americans belonged to a race that was inferior to the White race biologically, culturally and socially” (p. 7). He outlines how this ideology has persisted in some sectors of American society. An outcome of this ideology is that a cultural deficit model can develop which blames individuals, families or indeed entire cultural groups for low educational attainment rather than examining the responsibility of schools or other learning institutions. Morris (2002) outlines how entrenched the perception of African American intellectual inferiority remains in some American schools until the recent past (and perhaps to the present day). He states: “Who gets selected for gifted education programs is rooted in enduring perceptions, whether conscious or unconscious, that African American people might be intellectually inferior to white people” (p. 59). Morris further reveals that in some instances, such is the prejudice against African American students being placed in advanced academic tracks that white students with lower standardised test scores have been placed in advanced tracks, while African American students with higher scores have been placed in lower tracks.

Like African Americans and Hispanics, Piirto (2007) claims Native Americans have suffered the consequences of a history of oppression of one culture by another. She elaborates further, that Native Americans have similarities to other repressed and minority cultures where a Western European culture dominates and identification must recognise the psychological effect of being in a minority as well as the effects of economic disadvantage. Piirto argues that the effect of being segregated on reservations must be considered for individuals in these circumstances, as talents are less likely to develop and be evident in communities

where people are oppressed.

One of the effects of deficit-based thinking is that acculturated students of a minority culture seem more likely to be viewed as gifted and talented than those who are less acculturated. Students who become acculturated to the dominant culture gain cultural capital and therefore adjust more readily to the mainstream school system. Masten and Plata (2000) provide an example of the conflict between acculturation and multiculturalism whereby researchers investigated the effect of acculturation on teacher ratings of Hispanic and Anglo-American students. Teachers were asked to rate students in terms of their learning, motivational, creativity and leadership characteristics. Anglo-American students were rated significantly higher than Hispanic students and highly acculturated Hispanics received much higher ratings from teachers than did those with a low level of acculturation. A study of 130 Latino American students in a large urban middle school (Santiago et al., 2014) found that encouraging adoption of dominant cultural values led to acculturative stress with a likely negative impact on student achievement. These two studies highlighted the need for teachers to seek to avoid prejudice based on ethnicity or level of acculturation when teaching and assessing students. This raises the question of whether the level of acculturation of Māori and Pasifika students has affected their selection for gifted and talented programmes in the mainstream New Zealand secondary school setting.

One of the consequences of lack of acculturation can be that such students can lack the cultural capital to be able to achieve well in the education system. The issue of cultural capital was a salient issue in the previously mentioned SEMO project in New Zealand. The Ministry of Education (2004) set up the SEMO project focusing on school governance, reporting to parents, and Pasifika student achievement. A significant issue raised in the SEMO report, of relevance to identification and provision for gifted and talented Pasifika students, was that many Pasifika students lacked the cultural capital required to achieve well in the New Zealand education system. The report concluded:

Themes identified in the research literature on promoting Pasifika children's identity and reducing the mismatch between the cultural capital

students bring to a Palagi-dominated [European-dominated] system and what is expected of them are evident in the Ministry's plan and our interviewee's responses. The underlying assumption appears to be that improving achievement is likely to occur through teachers giving greater recognition to Pasifika children's culture, improving the interface and understandings between home and school, increasing bilingual provision and resources and giving more positive publicity to the achievement of those who have succeeded. (Ministry of Education, 2004, p. 107)

It is likely that many gifted and talented students from minority cultures are never identified as a result of deficit thinking and the expectation that students will be acculturated and bring with them certain cultural capital. This could lead to selective referrals for gifted and talented programmes with teachers overlooking students who do not fit their own narrowly defined conceptions of giftedness and talent. The issue of selective referrals may be addressed by implementing key principles of identification as outlined by Davis et al. (2011), and Easter (2011). Davis et al. posit that there are five broad principles that should underpin identification for gifted and talented learners. These are advocacy (designed in the interests of all students), defensibility (based on the best available research), equity (ensures nobody is overlooked), pluralism (uses a broad definition of giftedness), and comprehensiveness (identifies and provides for as many students as possible). Easter's specific principles have an underlying principle: "Identification should not rest on any single approach but employ a multi-method procedure" (p. 210). Methods suggested are teacher observation and nomination, self-nomination, peer nomination, parent nomination, rating scales, portfolios, authentic assessment, and standardised tests of creativity, achievement and intelligence. Easter considers "perhaps the best forms of identification are unobtrusive and naturally embedded into sound everyday learning and teaching" (p. 210). However, she advises, for this to occur expert teachers are required. It would seem that adhering to Davis et al. and Easter's principles could minimise the issue of selective referrals and result in much greater representation in gifted programmes of currently under-represented groups.

In spite of the advocacy of Davis et al. (2011), Easter (2011) and others of the

need for improved identification processes, Ford (2011) argues that culturally-fair identification procedures remain an issue in the United States and this issue needs to be addressed. She states, “Educators involved in assessment have a responsibility to adhere to ethical guidelines, which helps to ensure equity on behalf of all students, regardless of income, socioeconomic status, and racial, cultural and linguistic backgrounds” (p. 95). The need for inclusive procedures is also recognised by the Education Review Office (2008) in New Zealand who recommended teachers, “develop inclusive and appropriate definitions and identification procedures for gifted and talented students that reflect student diversity and encompass a variety of gifts and talents” (p. 54).

The bias of test and assessment procedures and content contributes to selective referrals when students from minority cultures are disadvantaged through their lack of cultural capital. The use of the sub-cultural languages such as non-standardised English, the nature of testing and the issue of acculturation all relate to the lack of cultural capital. Davis et al. (2011) explored the impact of sub-cultural languages on identification. They stated that there is substantial agreement that students from minority cultures are more likely than the average student to have difficulty with tests of verbal ability. The tests are based on middle-class English, but the sub-cultural languages such as African American English, Hawaiian pidgin, and Native American languages are different. As a result, the speaker of a sub-cultural language uses different linguistic structures, categorises differently and makes different associations.

It is significant that for many Native American students, on the Weschler tests there is a wide discrepancy between verbal and performance scores with the verbal scores being the lower of the two. Reynolds and Suzuki (2012) suggest the lower verbal scores are at least partly caused by language and cultural differences. Both intelligence tests and achievement tests are fraught with problems when used as the basis for identifying gifted children from minoritised groups because they are based on a perception of giftedness that is much too narrow. However, they can also highlight abilities in some students that would otherwise be overlooked. Where verbal ability, as tested in IQ tests or other standardised tests, is a significant contributor to an educator’s perception of giftedness, students from

minoritised cultures are likely to be significantly disadvantaged. Nevertheless, a student from a minoritised culture who has performed poorly in the verbal section of an IQ test may in fact be a skilled orator in his/her native language. Others have also identified bias and discrimination in standardised tests (e.g., Richert, 2003; Sowell, 1993; Sternberg et al., 2011).

However, Erwin and Worrell (2012) challenge the notion that standardised tests are unfair for specific groups. For example, they assert that in today's tests, numerous sophisticated procedures have been utilised to remove content-related bias. Erwin and Worrell conclude:

Although assessment instruments are convenient targets to vilify, there is no compelling evidence that they play a major role in underrepresentation in GATE programs. Thus blaming tests for underrepresentation is neither useful nor accurate and distracts from focusing on the underlying cause, the achievement gap. (p. 84)

While challenging the notion of unfairness in assessment instruments, Erwin and Worrell do not consider they are the only way to identify giftedness and talent, but in fact, recommend that decisions should invariably be made based on multiple sources of evidence. Warne, Yoon and Price (2014) argue that the notions of fairness and test bias are not synonymous. Whereas fairness involves an ethical or moral judgement, bias involves the interpretation of actual test scores. Warne et al., state that criticisms of the unfairness of tests are based on the claim that particular items are unfair. However, they assert these items are too few in number to account for the score differences. In their view, rather than focusing on the alleged bias of tests it would be more beneficial to focus on what the tests reveal about social inequalities and what might be done to reduce these inequalities.

It is possible to improve the fairness of tests by improving test procedures without altering their content as Sternberg (2000b) found in his study in Tanzania. He worked with 358 young school children near Bagamoyo using tests that measured the skills required in conventional tests of intelligence. However, instead of administering them in a static manner (that is, without prior training in the test-taking skills required) they were administered dynamically. Dynamic testing

means that students are given feedback in order to improve their scores. First, the students were given a test. They were then given five to 10 minutes instruction on the skills required to improve their scores after which the tests were readministered. After such a short period of instruction one would not expect dramatic gains to be made. However, the average gains were statistically significant. Scores on the pre-test showed only weak, though significant correlations to the post-test, at about the 0.3 level. Sternberg suggested that when tests are administered statically to children in developing countries they might be unstable and easily subject to influences of instruction. He found the post-instruction scores to be a better predictor of cognitive performance than the pre-instruction scores.

Children from developing countries may not be accustomed to taking Western-style tests so benefit from even small amounts of instruction about what is expected of them. The pre-test instruction increases their cultural capital improving their opportunity to achieve. A similar response to dynamic testing as Sternberg found in Tanzania was also found with Australian Aboriginal children (Chaffey, Bailey, & Vine, 2003). It could therefore be worthwhile exploring the impact of dynamic testing on the performance of Pasifika and Māori students as well as students from other indigenous and/or minoritised cultures. If dynamic testing was more widely used it could have the potential to increase the number of Māori and Pasifika students in programmes for the gifted and talented.

In some schools, attempts have been made to overcome cultural deficit thinking and the lack of cultural capital for some students from minoritised cultures by the development and use of culturally appropriate and more culturally inclusive identification tools. Kim (2006) posited that Torrance's Figural Tests are valuable in identifying giftedness in that they allow, "another perspective on the student's ability that is vastly different from other aptitude and achievement tests and...maybe less biased for those who speak English as a second language" (p. 8). Torrance (1971, 1977) also argued that open-ended tests of creativity are free from socio-economic or cultural bias because the perception of giftedness on which they are based does not require a strong reliance on verbal ability. However, Cropley (2000) suggests that, because creativity is multidimensional,

several tests should be utilised. A comparison of Japanese and American responses to the Figural tests (Seaki, Fan & Van Dusen, 2001) showed there may be differences in understanding of originality, indicating culture specific understandings affect student responses.

A further example, the *DISCOVER (Discovering Intellectual Strengths through Observation while allowing for Varied Ethnic Responses)* assessment was developed by Maker, Rogers and Neilson (Maker, 1997) which Sarouphim (1999) stated is an attempt to bring a broad, culturally fair perception of giftedness to the identification of gifted and talented students. The assessment is based on Gardner's theory of multiple intelligences and Maker's definition of giftedness and has been used with children from minority ethnic groups. One of the problems with students who are identified is that there may be a mismatch with the types of programmes traditionally offered for the gifted. School policy makers would need to ensure that where *DISCOVER* is used, the programmes offered to identified students have linkages to the skills being tested. Coherence and synergy between identification and provision are necessary for tools like *DISCOVER* to be effective.

While Torrance's Figural Tests and *DISCOVER* may be promising tools for identifying giftedness and talent in minority groups, Raven's Progressive Matrices, although not free of bias, has been found to be a useful, easily-administered instrument for identifying giftedness in minority ethnic groups. For example, in a community with a 40 per cent Hispanic population, 175 students from Grade 3 – 5 and 8 were tested for potential giftedness using Raven's Progressive Matrices (Raven's), the Naglieri Nonverbal Abilities Test (NNAT) and the Iowa Test of Basic Skills (ITBS). Raven's identified 47.25% of ethnically diverse students as potentially gifted, NNAT 24.64% and ITBS 22.96%. Raven's was therefore viewed as being significantly more likely to identify potential giftedness amongst minority ethnic groups than NNAT and ITBS and its wider use as a screening device was recommended (Lewis, DeCamp-Fitson, Ramage, McFarland & Archwamety, 2007). Torrance's Figural Tests, *DISCOVER* and Raven's Progressive Matrices provide assessments that may enhance equity and comprehensiveness in identification procedures.

Well-meaning educators, who promote acculturated students for their gifted and talented programmes, while not utilising more culturally appropriate identification procedures, perpetuate cultural deficit thinking. As a consequence many who should be identified as gifted or talented can languish in classrooms without appropriate provision for their intelligence or abilities.

### **Programme provision and pedagogy**

In addition to addressing issues of identification in order to make appropriate provision for students from minority cultures, a focus on culturally relevant pedagogy is important for their talents to be nurtured. At the heart of culturally relevant pedagogy are teachers. Ladson-Billings (1994) states:

Teachers who practice culturally relevant methods can be identified by the way they see themselves and others. They see their teaching as an art rather than a technical skill. They believe that all of their students can succeed rather than that failure is inevitable for some. They see themselves as part of the community and see teaching as giving back to the community. They help students to make connections between their local, national, racial and cultural identities. (p. 25)

Bishop and Berryman's (2009) Effective Teaching Profile, developed through the Te Kotahitanga project, aligns with the use of culturally relevant methods, connecting students with their racial-ethnic and cultural identities, and is based on the belief that all students can succeed. The first two characteristics of effective teachers identified in the profile are that they: "care for students as culturally located individuals [and] have high expectations for students' learning" (p. 9).

Gay (2010) argues that culturally responsive teaching is validating, comprehensive, multidimensional, empowering, transformative and emancipatory. Students are validated when teachers utilise "the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them" (Gay, 2010, p. 31). In this way they demonstrate that they care for students as

“culturally located individuals” (Bishop & Berryman, 2009, p. 9). Gay posits that comprehensive teaching occurs when the classroom environment focuses on educational excellence that includes academic success, critical social consciousness, cultural competence, responsible community membership and political activism. When teaching is multidimensional the teacher gives consideration to multiple facets that influence student learning: classroom climate, student-teacher relationships, curriculum content, contexts for learning, instructional methods and assessments. Bishop et al. (2014) affirm the centrality to culturally relevant pedagogy of the multi-dimensional facet of positive teacher-student relationships. Participants in Ukpokodu’s (2007) and Bishop et al.’s (2014) studies suggest they are empowered in their learning when teachers make clear to students that they expect them to succeed. The purpose of transformative teaching like this is to confront and change the cultural hegemony of many schools. Thein, Beach and Parks (2007) explored one potentially transformative pedagogical practice in teaching multicultural literature to white students. They required students to take the perspectives of diverse characters while studying the literature through drama, discussion and writing. Gay (2010) claims that emancipatory teaching, “releases the intellect of students of color from the constraining manacles of mainstream canons of knowledge and ways of knowing....lifts the veil of presumed absolute authority from conceptions of scholarly truth typically taught in schools” (pp. 37-38).

As already discussed, developing culturally responsive pedagogy was central to the Te Kotahitanga project (Bishop et al., 2014) which was influential in raising the achievement of Māori students in 49 secondary schools in New Zealand. It was also central to the He Kakano (Ministry of Education, 2012b) project, which was launched in 2010. Like Te Kotahitanga, the project targeted secondary schools. It was described as: “a strategic school-based professional development programme with an explicit focus on improving culturally responsive leadership and teacher practices to ensure Māori learners enjoy educational success as Māori” (Ministry of Education, 2012b, p. 1).

Te Kotahitanga and He Kakano emphasised the importance of looking to Māori culture itself for solutions to underachievement of Māori. This view was echoed

in the research of Bevan-Brown (1999, 2011a). However, her focus varied from that of the Te Kotahitanga and He Kakano projects. As mentioned earlier in this chapter, Bevan-Brown focused on a Māori perspective of giftedness and talent and its implications for identification and programme provision. It is acknowledged that there is no single Māori perspective of giftedness but Bevan-Brown's recommendations are considered appropriate for many Māori learners.

Based on her research, Bevan-Brown (2011a) makes several recommendations regarding providing for gifted and talented Māori students. Consulting and working in partnership are considered important in identification, programme provision and developing students' aspirations and self-esteem. Identification procedures and programme provision need to be challenging and culturally responsive and appropriate. Such programmes may be influential in encouraging and developing students in their Māoritanga. To provide more appropriate identification procedures and programmes, teachers and other professionals would benefit by improved training in terms of Māori learners in general, as well as gifted and talented Māori learners in particular.

The principle of cultural appropriateness, cultural responsiveness, and challenge in classroom methods and programmes posited by Bevan-Brown (2011a), is reiterated in the report of the Ka Awatea<sup>33</sup> project (Macfarlane et al., 2014). All eight recommendations of the report specific to teachers and schools make links to cultural issues. The first of the recommendations proposes teachers and schools should: "Value Māori students' cultural distinctiveness and support them to develop a degree of academic and cultural self-confidence and self-belief" (Macfarlane et al., 2014, p. 182). The other seven recommendations elaborate on how that valuing and support should be demonstrated.

Bevan-Brown (2009) states that making culturally appropriate programme provision in terms of content, for gifted and talented Māori learners needs two different levels of consideration. First, there is the inclusion of specific Māori content across the whole curriculum. Macfarlane et al. (2014) also affirm the

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<sup>33</sup> Dawning of a new era

inclusion of specific Māori content across the curriculum. At the second level, Bevan-Brown (2009) posits that teachers should reflect on how extension can be provided for students who show giftedness and talent in terms of their qualities and cultural abilities and how Māori content can be included in that provision. For them, developing in their Māoritanga is considered to enhance the development of their giftedness. Macfarlane et al. (2014) also claim that valuing and developing their Māoritanga aids the development of giftedness and talent in other domains.

It is important not to confine programme provision to what is provided in terms of content. The affective domain and the concept of service to others are also significant aspects of programme provision. Providing for students who are emotionally and spiritually gifted is equally important to providing for students who are physically, intellectually or musically gifted (Bevan-Brown, 2009).

Utilising one's gifts in the service of others is generally integral to a Māori view of giftedness (Bevan-Brown, 2011a) and therefore integrating a service component in some way into programmes for gifted and talented Māori students is culturally responsive. A major seven-year research study undertaken with 112,000 college and university students across 236 American campuses showed that: "Taking service-learning courses...has a direct positive effect on students' overall GPA; students who have done community service as part of a class tend to earn somewhat higher grades than do students who have not taken such courses" (Astin, Astin & Lindholm, 2010, p.127). Jones and Hill (2003) in their study of 15,000 students from college and university campuses found community service provided them with opportunities to consider what was important in their lives and caused them to reflect on their identities. They stated: "It brought clarity about the self that perhaps few other life experiences had afforded, especially in the context of education" (p. 532).

Bevan-Brown's recommendations imply that the status quo in mainstream education in New Zealand will need to be challenged. Others have also argued that Eurocentric constructs in mainstream education need to be challenged and replaced by more inclusive concepts of giftedness if gifted and talented Māori students are to have an increased profile in New Zealand's schools (Jenkins,

Moltzen & Macfarlane, 2004). They state:

In accordance with the principles of partnership, determination and power-sharing expressed in the Treaty of Waitangi, mainstream education in Aotearoa–New Zealand must be unpacked and co-constructed with an authentic bicultural discourse – a discourse valid for, and validating of, the culturally lived realities of both Māori and Pākehā. It is within this redefined and reconstructed pedagogical context that Māori giftedness may be embraced authentically. (p. 67)

Redressing the traditional imbalance of power between Māori and Pasifika, and contesting European epistemologies is viewed as important for making effective provision for Māori and Pasifika students (Bishop, 2005a; Macfarlane, 2010a; Smith, 2005; Vaioleti, 2006). Macfarlane (2010a) cites Otumoetai College as an example of a New Zealand secondary school that has sought to redress this imbalance. Bevan-Brown and Macfarlane assisted in crafting the educational vision of the school in order to make appropriate provision for gifted and talented Māori students. Macfarlane's *Educultural Wheel* (2004) with its five core Māori cultural concepts, contextualised Bevan-Brown's (1999, 2011a) notions of giftedness and talent amongst Māori within the current setting of New Zealand's secondary schools. Otumoetai College teachers, Farthing, Irvine and Millar (2010) state, "For Otumoetai College the *Educultural Wheel* comprising of Bevan-Brown's concepts, crystallised the knowledge that every teacher is a teacher of gifted and every teacher is a teacher of Māori" (p. 212).

The relationship between identity and whakapapa is an important one in Māori culture. For students to be able to develop their identity it is important that local, national, racial, cultural and global connections are made. Whakapapa enables these connections to be made. Webber (2011c) suggests that in terms of Māori identity, whakapapa is the most significant characteristic and that it is through whakapapa that Māori connect to a particular marae or place and are linked to their relatives, including tupuna<sup>34</sup>. As stated earlier, Webber argues that integrating whakapapa into the curriculum could benefit gifted Māori students in

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<sup>34</sup> Ancestors

multiple ways. Hemara (2011) also underscores the importance of whakapapa to developing the understanding of Māori learners arguing it can be described as “an esoteric and organic entity which acts as a vehicle for explaining existence while creating zones of understanding between individuals, communities and the universe” (p. 124). In addition, Bevan-Brown (2011a) found: “children who had a knowledge and pride in the Māoritanga<sup>35</sup> had heightened self-esteem and confidence and thus were more likely to develop their potential” (pp. 104-105). She also found, “children who were strong in their cultural identity, and were in a situation where their culture was valued, were less likely to succumb to negative peer pressure against achieving” (p. 105). This view is also affirmed by the work of Webber (2011a) on racial-ethnic identity. Similarly, *Tātaiako: Cultural competencies for teachers of Māori learners* (Ministry of Education, 2011), outlines the importance of whakapapa, making particular reference to the need for teachers to know children’s whakapapa as one of the ways in which cultural competence can be demonstrated. Integrating whakapapa into the curriculum could benefit both Māori students and their teachers.

In attempting to develop successful programmes for students of minority ethnic groups, one of the dangers is that stereotyping can lead to inappropriate programme provision. For example, Alton-Lee (2003) argues that attempts to provide better educational outcomes for Māori and Pasifika students through using “learning styles” approaches, can be counterproductive as it can lead to inappropriate stereotyping. In contrast however, Dunn, Griggs, Olson, Gorman and Beasley’s (1995) meta-analysis of 40 studies of 3100 participants, found that when students’ learning styles were matched appropriately with educational interventions, increased performance resulted. Ford (2011) argues that a teacher’s primary responsibility is to identify all students’ learning styles as she views this as being of key importance to effective programme provision. What remains unclear from the latter studies is what is meant by ‘learning styles’. The arguments for the notion of learning styles are not well established and critics of such a concept are widely respected (e.g. Gardner, 1995).

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<sup>35</sup> Māori culture

While there has been limited research undertaken on gifted and talented Māori students, even less is available regarding gifted and talented Pasifika students. One Pasifika study was Rutherford High School's Talent Development Initiative (TDI) discussed earlier, with its focus on development and monitoring of programmes for gifted and talented Pasifika students. The initiative identified factors that are considered to be crucial to successfully implementing this focus. Identifying students' motivations, passions, strengths and weaknesses enables goals to be developed with opportunities to achieve. Through these opportunities students' intrapersonal and interpersonal skills are able to be developed with students assisted by key support people in turning their gifts into talents (Faaea-Semeatu, 2011).

Māori and Pasifika cultures place emphasis on the need for programme provision and pedagogy to be culturally responsive. They focus on talent development and the roles teachers and mentors play in that development. This subsection briefly alluded to issues of cultural and racial-ethnic identity as they relate to pedagogy. The following subsection explores the issue of racial-ethnic identity in greater depth.

### **Racial-ethnic identity**

It is widely argued that racial-ethnic identity, that is being knowledgeable about and having a sense of belonging to one's racial-ethnic group, is considered an important element in the academic success of students from minority cultures (Bevan-Brown, 2011a; Fletcher, Parkhill, Fa'afai, Taleni & O'Regan, 2009; Ford, 2011; Hébert, 2011; Macfarlane et al., 2014; Phinney, 1996; Samu, 2006; Webber, 2011a). Webber (2011a) claimed that the feelings and attitudes connected with racial and ethnic group membership are foundational aspects of a young adolescent's identity. Her research into racial-ethnic identity in five large multi-ethnic high schools in New Zealand included interviewing academically successful students of four ethnicities and comparing their views of what had contributed to their success. The ethnicities were New Zealand Pākehā, Māori, Samoan and Chinese. Data from student interviews in Webber's study indicated that racial-ethnic identity in the school setting was generally of greater

significance to high-achieving Māori and Samoan students than it was to New Zealand Pākehā and Chinese.

National and international research has linked better educational outcomes for minoritised groups to strong racial-ethnic identity, with its strong sense of pride. Macfarlane et al. (2014) reported that in their study: “According to all of the students in the study their Māori identity lay at the heart of all things important and their educational attainment was considered complementary to this” (p. 141). The high-achieving Māori and Samoan students in Webber’s (2011a) study also linked their achievement to positive racial-ethnic identity as well as group membership. Outside of New Zealand, positive racial-ethnic identity has also been shown to be strongly linked to academic success amongst minority students. For example, a longitudinal study of African American adolescents revealed that those whose racial-ethnic identity was integral to their self-concept achieved higher grades, attended school more often and had a greater probability of graduating and going on to college (Chavous et al., 2003).

In addition to strong racial-ethnic identity contributing to higher educational outcomes for minority groups, there appears to be a link to positive social-psychological consequences. Webber (2011a) claims that positive racial-ethnic identity is important for the adolescent’s psychological well-being and development. One of the positive psychological outcomes noted by Macfarlane et al. (2014) was that cultural efficacy and positive Māori identity were closely connected to student resilience. The high-achieving Māori and Samoan students in Webber’s (2011a) study were also deemed resilient. She argued their positive racial-ethnic identity seemed to be a protective factor against the potentially damaging effects of racism, discrimination and prejudice which all of the students experienced. They valued being part of the in-group of academic achievers as well as their own racial-ethnic group, and were motivated to dispel stereotypes about the intellectual inferiority of their racial-ethnic group. These students were what Carter (2006) termed ‘cultural straddlers’ because they developed a variety of social identities enabling them to become actively involved in various cultural contexts. As cultural straddlers their pride in their racial-ethnic identity seemed to enable them to build positive relationships both within their own racial-ethnic

group and outside of it. These students were neither acculturated to the dominant culture nor rejecting its benefits. Carter comments: “The straddler concept illuminates another place on the spectrum of identity and cultural presentations for African American and other ethnic minority youths that splinters the acculturative/oppositional divide” (p. 306). In Carter’s view, the cultural straddlers have found the best social and academic balance because they have understood both nondominant and dominant cultural capital. Cultural straddlers, as Carter explains, are a varied group in terms of how they straddle different cultures. Some are ‘blended biculturals’, strategic navigators, embracing both home and school cultures. Others are ‘separate’ in their identity aligning with their racial-ethnic culture. They may be vocal in their criticism of the school’s ideology but still achieve well academically.

Wakefield and Hudley (2007) argue that developing a strong racial-ethnic identity is especially important for indigenous people because research with indigenous adolescents has shown positive social-psychological consequences for those with strong racial-ethnic identity. They claim, when indigenous people know about their racial-ethnic heritage, understand what group membership means, and are committed to their racial-ethnic identity and its role in their lives, positive social-psychological outcomes occur. Further study of the impact of racial-ethnic identity on social-psychological wellbeing is timely. There could well also be connections to improved academic performance meaning that the links with racial-ethnic identity are pertinent to this study.

It is apparent that students’ home backgrounds have a significant role to play in the development of positive racial-ethnic identity. Webber’s (2011a) study showed: “It is likely that parents’ racial-ethnic socialisation practices were associated with the high-achieving students’ high self-efficacy and school engagement, and thus their enhanced cognitive abilities, academic orientations and success in school” (p. 151). Racial-ethnic socialisation practices in the homes of students in this study included messages about opportunity both within and beyond school as well as dealing with bias in terms of negative stereotyping and discrimination. The messages about opportunity affected students’ perceptions of what constituted opportunity as well as their subsequent positive engagement in

education. Webber considered that messages about bias may have lessened students' vulnerability to stereotyping of their racial-ethnic groups' intellectual capacities and in turn influenced their achievement. In Webber's study, one Māori girl indicated a challenge in developing her racial-ethnic identity was her fair phenotype. Name-calling of both her and her mother by other Māori students was the challenge she faced. The solution was for the mother and daughter together to learn about their iwi heritage and ancestry. Whānau in Macfarlane et al.'s study (2014) reported that they expected young people to know their Te Arawatanga<sup>36</sup>. Furthermore they stated that they actively encouraged young people to know what was unique about them, have a strong sense of self, and take pride in their identity. In the United States, Miremadi's (2013) research with African American and Hispanic female college undergraduates also found parental expectations and support were important to the development of a racial-ethnic identity that was favourable to their engagement in higher education.

In addition to parents and other whānau, peers also have a significant role in the development of a positive racial-ethnic identity. Webber (2011a) posits, "Racial-ethnic identities are being continually co-constructed as individuals and groups accept, reject, challenge, and negotiate the meanings of race, ethnicity, and racial-ethnic group membership and boundaries" (p. 152). Peers are a key group involved in this co-construction for adolescents from minority cultures. An important issue for the students in Webber's (2011a) study was the racism experienced both inside and outside of school, evidenced by stereotypes, prejudice and discrimination from peers and others. The most frequent examples from peers were using racially insulting names, and ridiculing others because of negative stereotypes in society regarding their racial-ethnic group. It seems that an important protective factor for the high-achieving students in Webber's study was the support networks available to them that included other high-achieving students.

Involvement in extracurricular activities (including cultural clubs and activities and language clubs) both during and after school hours gave the students in Webber's (2011a) study, a wide range of social connections with friends, and

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<sup>36</sup> The traditions, ideals and culture of the Te Arawa iwi from the Rotorua region

appears to also have been a protective factor. For some students, involvement in gifted and talented classes with peers of similar ability contributed to their academic achievement and positive self-concept, including racial-ethnic identity. What the study does not reveal, is whether any of the Māori or Samoan students were the only one of their ethnicity in any of these classes, and if they were, whether this affected their self-concept. Miremadi (2013) reported that as part of establishing a strong racial-ethnic identity, most of the women in her study joined a cultural group. This enabled them to build friendships, learn about and embrace their race or ethnicity and to feel protected from discrimination and prejudice.

Further influences on the development of positive racial-ethnic identity are schools and teachers. However, Macfarlane et al. (2014) concluded that for highly-achieving Māori students, schools only had a minor role in developing racial-ethnic identity. They found that a few Māori teachers involved with kapa haka, Māori studies and/or te reo Māori had significant interactions with students that assisted in the development of racial-ethnic identity. However, both Macfarlane et al. and Webber (2011a) agree that schools can do more to develop students' racial-ethnic identity and make a variety of practical suggestions, particularly in relation to schools, whānau and communities working together. Along with Macfarlane et al. and Webber, The Ministry of Education's *Ka Hikitia – Accelerating Success 2013-2017* (2013) and *Pasifika Education Plan 2013-2017* (2012c) outline the importance of whānau and schools working in partnership to value and celebrate Māori and Pasifika identities, languages and cultures.

There are however challenges for schools and teachers in fostering a strong racial-ethnic identity. For example, Wright's (2009) study of African American male students found that misconceptions about the meaning of students' expressions of masculinity and racial-ethnic identity in terms of dress, manner of talk and behaviour were likely to bring them into conflict with schools. For instance, the 'cool pose' could be taken by schools and teachers to mean, "slickness, bitterness, anger and distrust of schools and teachers" (Wright, 2009, p. 126). However, Wright explains that looking at the issue from the students' perspective the cool pose could denote social competence, racial-ethnic pride, leadership, confidence and control when dealing with difficult situations or be a coping mechanism to

assist in countering racial inequality. In order to avoid developing misconceptions, schools and teachers need to learn to read the cues from an African American student's perspective rather than from a white American perspective. This would be a significant step towards fostering positive racial-ethnic identity amongst African-American male students.

It should be noted, while there are many people who are of a single ethnicity, or choose to identify with a single ethnic group, there are increasing numbers of people who are multi-ethnic and choose to identify with their multiple ethnicities. There are also some who choose not to identify with any ethnic group. For students attempting to develop a multi-ethnic identity, Chaudhari and Pizzolato (2008) found that there could be asynchronous development of the three planes of ethnic identity: identity claims, induced feelings about identity, and cognitive identity. All three planes could be negatively influenced by others' perceptions. For example, Rosa in their study, was of Lithuanian, Puerto Rican and African American descent, was raised as an African American, but unlike her siblings, had a fair phenotype causing a level of dissonance with regard to her ethnic identity. Chaudhari and Pizzolato found that when students shifted the way they cognitively processed their identity from external to internal they were able to develop more secure identities. When identity claims were portrayed externally they were influenced by situations and relationships, but when they were portrayed internally, they were cognitively renegotiated.

In the New Zealand context there have been challenges for many individuals of mixed Māori and Pākehā ancestry. Webber (2008) is of mixed ancestry but identifies as Māori "because I feel Māori" (p. 12). Nevertheless her experience of being both a Māori and Pākehā caused her to explore: "the issues and implications centred around aspects of not knowing 'who I am', of being lost, insignificant, of not belonging, of not fitting in and not being good enough" (p. 12). Collins' (2004) research found that the context of New Zealand society forces most Māori to become bicultural to adapt to Pākehā dominance in society. Those of mixed Māori/Pākehā descent are able to become enculturated and socialised in both Māori and Pākehā societies. This may be a perceived benefit, but participants in Collins' study experienced racism towards them as Māori from Pākehā or others,

and from Māori who viewed them as Pākehā. Collins considers those of mixed Māori and Pākehā descent are able to strengthen their cultural/ethnic identity by developing their belief in their Māori selves.

### **Summary**

Narrowly based, Eurocentric conceptions of what constitutes giftedness and talent still predominate within schools in New Zealand as well as other countries in the Western world. These conceptions invariably affect the identification procedures, programme provision and pedagogy in schools. The historical and current pathologising of Māori and the associated deficit thinking amongst educators has worked with the narrowly based conceptions of giftedness to keep Māori students under-represented in programmes for the gifted and talented. As a result many of the gifts and talents of highly able Māori students remain unidentified and unrecognised within New Zealand's schools. It is highly likely that such deficit thinking also holds true for Pasifika students. This raises the question of what actions can be taken by educators to address the issue of under-representation.

When students from indigenous and other minoritised cultures are identified as gifted or talented, it is considered important that the programmes schools put in place and the pedagogy that is utilised, enable their gifts and talents to be nurtured and developed. For this to occur there is a strong case made in the literature for programmes and pedagogy to be culturally responsive. For example, according to Bevan-Brown (2009) and Macfarlane et al. (2014), Māori-relevant content incorporated across the curriculum assists the engagement of many Māori students in the learning process. Māori and Pasifika-relevant content and pedagogy can contribute to the development of racial-ethnic identity, a significant aspect of personal development that can enhance academic success. Bevan-Brown also asserts that because Māori view giftedness as holistic in nature, programmes need to incorporate the affective and spiritual domains and provide opportunities for service to others. Like Māori, Pasifika also have a holistic view of giftedness. This raises the question of how a holistic Māori and Pasifika view of giftedness can be better incorporated into the philosophy and classroom practice of schools. Developing a secure racial-ethnic identity can be important in enabling students to

effectively straddle the different worlds in which minoritised students live. This may enable their talents to be more effectively identified and nurtured.

It is clear we need to know more about why Māori and Pasifika students are under-represented in programmes for the gifted and talented and what actions might be taken to address that under-representation. More also needs to be known about how best to provide for those who are identified. Through researching the stories of academically successful Māori and Pasifika students this study provides insights that can contribute to identifying and nurturing talent by reducing under-representation and improving programme provision.

## Chapter 4: Research Methodology

### Introduction

The high academic achievement of gifted and talented Māori and Pasifika secondary school boys in the context of two state secondary boys' schools is the focus of this investigation. Several studies have focused upon raising the academic achievement of New Zealand's most at-risk groups, specifically Māori and Pasifika students. For example, *te Kotahitanga* (Bishop et al., 2014) was a major study focusing on Māori student achievement. An example of a Pasifika study was one which focused on teacher and parent perceptions of supports and barriers to achievement by Pasifika students in literacy and learning (Fletcher et al., 2009). However, it is only with Ballam's (2013) and Macfarlane et al's (2014) recent studies, that Māori and Pasifika students who are achieving highly in the academic field, have become an important focus of research. At the time this study commenced in 2007 there was potential therefore, to examine the reasons why some Māori and Pasifika secondary school boys were achieving high academic standards.

### Chapter overview

This chapter examines factors that influence this study, and the research methodology that underpins the research methods. It begins with a general discussion of qualitative research, outlines some insider-outsider issues in research, and then explains why narrative inquiry is the primary methodology utilised. This is followed by discussion of *kaupapa Māori*,<sup>37</sup> *Talanoa*<sup>38</sup> and *teu le va*<sup>39</sup> research principles and their links to narrative inquiry followed by the use of grounded theory tools of analysis. The focus then shifts to issues related to methods used in the research. How students in School A and B were placed in particular classes and procedures related to method are outlined. Next, the specific methods used for gathering data are detailed. Finally, the chapter addresses important ethical issues, the issue of trustworthiness of data and further discusses methods of analysis.

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<sup>37</sup> Māori agenda/philosophy

<sup>38</sup> Pacific Island form of dialogue bringing people together to share opposing views

<sup>39</sup> Samoan research methodology emphasizing reciprocal relationships

### **Qualitative research**

In developing my methodology, the most appropriate means for examining the research questions needed to be determined. It was necessary to consider methodologies that would best enable the sociocultural framework for the development of giftedness and talent to be examined. Qualitative research methodologies were deemed more appropriate to the research questions because the questions required gathering data in natural settings and necessitated attention to the lived experiences and meanings of participants. Denzin and Lincoln (2005) state:

Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world...qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. (p. 3)

Qualitative research may involve the researcher as a participant in the project being researched. Whether this is the case or not, the researcher constructs the reality he or she perceives on the basis of subjective data. Qualitative research involves the development of a trusting relationship between the researcher and research participants that enhances the quality of responses. This is significant because the nature of reality in qualitative research is socially constructed (Denzin & Lincoln, 2005). Qualitative research methodologies are particularly suited to the cohort of students who are the focus of this study. The natural settings of students' schools and parents' homes were appropriate venues for gathering data. Because 18 of the students involved in this study were from the school in which I taught and held responsibility as GATE director, I had a pre-existing relationship with them which included having a role in their pastoral care.

### **Insider-outsider issues in research**

Given that qualitative research includes the development of a trusting relationship between the researcher and research participants, attention needed to be given to approaches to build trust with participants. In terms of my research I was

particularly aware that as a Pākehā I was a cultural outsider. This issue of being a cultural outsider is complex and has a range of significant implications. Too frequently, research of minority groups such as Māori has been undertaken by majority group members. Such research can easily become another instrument of colonisation rather than a potential catalyst for self-determination and development (Smith, 2005).

The question of whether cultural insiders or outsiders are more likely to conduct trustworthy research relating to indigenous peoples has drawn comment from a number of researchers. There are some who consider that only a cultural insider can adequately understand indigenous peoples. For example, Swisher (1998) argues that people who are not Native Americans are unable to really understand aspects of the lives of Native Americans. Because of this, Swisher reasons that Native Americans can, and must, undertake research into the lives of Native Americans themselves. This is viewed as a way to give the participants more control of the research. In a similar way to Swisher, Vaioleti (2006) posits, with regard to Pasifika research: “If ontological assumptions are to do with the nature of reality, then any claim that non-Pacific researchers can interpret Pacific peoples’ Talanoa with any degree of accuracy is open to question” (p. 32). In addition to having better understanding of the culture being studied, Merriam et al. (2001) claim it is commonly perceived that insiders have easier access to research participants, are able to ask more appropriate questions, and are able to better interpret non-verbal cues.

Although there are clearly some advantages to insider research, for some researchers, insider-outsider status is not what is most significant. In contrast to Vaioleti, for Pasifika researcher, Fa’afai there was benefit to be derived from researching in partnership with Pākehā researchers. He commented: “Working with two Palagi<sup>40</sup> researchers enhanced my understanding and awareness of the issues pertaining to Pasifika literacy development” (Fletcher, Parkhill, Fa’afai & Morton, 2006, p. 47). A critical issue for Bishop (2005a) is who controls the research. He argues that kaupapa Māori research for instance is: “Māori research

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<sup>40</sup> European, Caucasian

by Māori, for Māori with the help of invited others” (p. 113). Others may participate in the research by invitation of the indigenous people but the setting of the agenda and the parameters of the research are under the control of the indigenous people. Although outsiders may participate in kaupapa Māori research an obstacle to their acceptance as researchers amongst Māori or other indigenous peoples is the history of research of indigenous peoples.

Insider-outsider research is not only an issue for indigenous peoples but also for other marginalised minority cultures such as African Americans. Tillman (2002) does not consider that in their case researchers necessarily need to be of African American ethnicity but they need to have the cultural knowledge to correctly understand and corroborate experiences of African-Americans in relation to the phenomena being studied. Narayan (1993) argues that rather than thinking of researchers in terms of insider or outsider status:

What we must focus our attention on is the quality of relations with the people we seek to represent in our texts: are they viewed as mere fodder for professionally self-serving statements about a generalized Other, or are they accepted as subjects with voices, views and dilemmas – people to whom we are bonded through ties of reciprocity....? (p. 672)

Bishop (2005a) posits that it is possible for concerns related to insider-outsider research to be alleviated, and aspirations of Māori and other indigenous peoples to be realised. For this to occur he considers all researchers need to invoke a: “discursive repositioning...into those positions that operationalize self-determination for indigenous peoples” (p. 113).

Although there are perceived to be many benefits to insider research, some concerns related to insider research have also been identified. Bishop (2005b) comments that insiders may be viewed as inherently biased, and because of their closeness to the culture, neglect to ask critical questions. Hammersley and Atkinson (1996) refer to “over-rapport” (p. 110) where insiders miss what they take for granted but outsiders detect as important. They argue that the close identification of insiders with the group being studied means the analysis of data is: “flawed by...partial perspectives” (p. 111). Furthermore, Hammersley and

Atkinson reason that: “intellectual distance” (p. 115) is necessary for a researcher to be able to undertake a proper analysis and in fact they advocate researchers adopt a “marginal position” (p. 112) as partially insider and partially outsider.

In contrast however, Native American researchers, Brayboy and Deyhle (2000) take issue with Hammersley and Atkinson’s (1996) stance on insider-outsider research. They consider that their lack of distance enhanced their research. Brayboy and Dehlye further argue that it is impossible for indigenous researchers to adopt a marginal position. Brayboy found that when faced with trying to balance the roles of researcher and Native American he invariably opted for his indigenous side. Dehlye considered that to have opted for a marginal position would have weakened her research. Although not of Navajo or Ute descent, as an ethnographer with part Choctaw ancestry, Dehlye was a partial insider when researching issues related to racism as they affected Navajo and Ute youth.

Before beginning this study I was aware that some may consider that as a cultural outsider I could not appropriately research issues related to the achievement of Māori and Pasifika boys. However, I considered that the EHSAS project with its focus on Māori and Pasifika achievement, by being thoroughly researched, could have the potential to benefit future gifted and talented Māori and Pasifika boys in New Zealand secondary schools. Moreover, boys’ state secondary schools, which are attended by many Māori and Pasifika students, have had little research undertaken focused on the achievement of Māori and Pasifika students who are gifted and talented. This therefore was viewed as a significant opportunity. As a result the idea was discussed with the Head of Māori, headmaster and deputy headmaster of my school and then the EHSAS project committee. The iwi representative from School A and the kaumatua (who was also a teacher) from School B, and the boards of trustees from both schools were consulted and gave their approval to the research proceeding.

I acknowledge that I am a cultural outsider and this influences the gathering and interpretation of data. My professional background gives me some understanding of Māori and Pasifika cultures. For over 15 years I was principal of two schools with Māori and/or Pasifika rolls from 57 to 63 per cent of the total cohort. While

principal of the second of these schools, as stated in Chapter 1, I studied Level 1 Te Ara Reo Māori (first year level) through Te Wananga o Aotearoa (The University of New Zealand). Because of the inextricable links between language and culture, some knowledge of language gives insight into a culture. For 18 of the students, although a cultural outsider, as the GATE director for their school, I was well known to the boys with an established relationship with them in connection with my role. This was even more the case for the nine of these students I had taught for a year.

### **Narrative Inquiry**

Narrative inquiry was the primary methodology utilised to research the questions. This enabled data to be gathered in a natural conversational setting and drew my attention to the lived experiences and meanings of participants. This methodology is well suited to research that involves Māori and Pasifika participants because co-construction of meanings may be facilitated through the collaborative storying that occurs. Māori and Pasifika cultures have very strong oral language traditions. For example, Bevan-Brown (2011a) cites the value placed on Māori story-telling by research participants and Vaioleti (2006) refers to Talanoa (conversation) as the traditional means by which Pasifika peoples share knowledge, emotions and experiences.

There are a variety of understandings of what narrative inquiry entails. Lyons and LaBoskey (2002) explain that in their research journey they developed an understanding of narrative as a scaffold and also a mode of inquiry. They state:

Narrative involved an intentional reflective process, the actions of a group of learners interrogating their learning, constructing and telling the story of its meaning, and predicting how this knowledge might be used in the future. We came to see that narrative was fundamentally an activity of the mind, a way of gathering up knowledge of practice, simply, a way of knowing and of knowing that one knew. (pp. 2-3)

In narrative inquiry, both the researcher and participants engage in the reflective process. Both are interrogating learning and the story that is told is co-constructed.

Thus, the knowledge of both the researcher and other participants is developed and enhanced through the narrative inquiry process.

Narratives are used to make sense of our lives. Bruner (1996) reasons that most of our lives are lived in a world assembled according to the devices and rules of narrative. In fact, MacIntyre (1984) argues that all human actions equate to enacted narratives. He further reasons, “It is because...we understand our lives in terms of narratives that narrative is appropriate for understanding....others” (MacIntyre, 1984, pp. 211-212). Not only can all human actions be equated to enacted narratives but Hendry (2010) argues that all inquiry is in fact narrative. In her view, it is impossible to reduce narrative to a method because it is in fact an overarching epistemology. Using narrative inquiry as a means of gathering data enabled me, as the researcher, to develop some understanding of others’ lives. More understanding of myself was also developed through narrative inquiry. As Clandinin and Connelly (2000) explain: “The narrative researcher’s experience is always a dual one, always the inquirer experiencing the experience and also being part of the experience itself” (p. 81).

In essence, narrative inquiry is, “a way of understanding concepts. It is collaboration between researcher and participants, over time, in a place or series of places, and in social interaction with milieus” (Clandinin & Connelly, 2000, p. 20). The inquirer and participants live and relive, tell and retell experiences and stories that make up their lives in what Clandinin and Connelly term a “metaphorical three dimensional inquiry space” (p. 50). These dimensions are: social and personal (interaction); place (situation); and past, present and future time (continuity).

Narrative inquiry may be viewed as a subtype of qualitative inquiry, may be oral or written, may be specifically elicited through a constructed setting such as an interview or may simply occur as part of a natural conversation. It retrospectively makes meaning of past events and experiences (Chase, 2005). However, Bochner (2007) posits that in gathering and telling of stories the researcher is “gathering knowledge *from* the past and not necessarily knowledge *about* the past” (p. 203). Nevertheless, narrative inquiry enhances understanding of the actions of others

and oneself and helps organise them into a meaningful whole. Connections are then able to be made to the consequences of events and actions over time. A narrative inquiry approach facilitates participants not only describing events but also expressing thoughts and interpretations as well as emotions (Chase, 2005).

While narrative inquiry can provide for the authentic stories of participants to be told, there are also ethical and other issues related to its use. Lyons and LaBoskey (2002) argue that a key ethical issue is that of power relationships. This issue is particularly salient for this study involving Māori and Pasifika students. The students and their parents needed to feel that they had the power to choose to become involved or not to, or to withdraw at any stage of the data collection phase, including at the stage of checking transcripts. They also needed to have a sense that the interview process was a collaborative journey. In this study I endeavoured to develop a sense of collaboration by explaining in the letters to student and parent participants that their support was needed (Appendices 3 and 4). Also, responses were affirmed during the interviews and some responses were paraphrased to check on the accuracy of understanding and provide a sense of journeying together.

Linked to the first ethical issue regarding power relationships is a second ethical issue of how to frame narrative inquiry within the context of a study that involves more than one cultural group. Bond and Mifsud (2006) state that their approach to transferring insights between dissimilar cultures is pluralistic. They outline the need for dialogue to be reciprocally respectful regarding cultural difference. Such dialogue is considered to facilitate the development of mutual understanding. However, Smith (2005) argues that:

It is when we ask questions about the apparently universal value of respect that things come undone, because the basic premise of that value is quintessentially Euro-American. What at first appears a simple matter of respect can end up as a complicated matter of cultural protocols, languages of respect, rituals of respect, dress codes: in short, the 'p's and q's of etiquette specific to cultural, gender and class groups and subgroups. (p. 98)

Smith's (2005) comments suggest there is more to effectively framing narrative inquiry within the context of a multicultural study than reciprocally respectful dialogue. The researcher also needs to consider the cultural protocols relevant to the situation. For example, Smith (1999) refers to the expression "Kanohi kitea or the 'seen face'" as a protocol important to Māori. To have credibility it is considered important to show one's face at important cultural events. Anae (2010) outlines how Samoans consider face-to-face contact is central to the concept of fa'aaloalo<sup>41</sup>. Face-to-face contact is therefore important to teu le va research, a methodology valued by Samoans in which reciprocal relationships are central.

Because of my awareness of the importance of this cultural protocol, during and beyond the time of my research, in my own school community, I attended whānau barbecues and Māori and Pasifika awards evenings as well as attending monthly whānau support group meetings. In the school in which I was principal prior to moving to School A, and following a capable kapa haka tutor enrolling her children in the school, I approached her to start tutoring kapa haka at the school; an invitation which she gladly accepted. I also recognised the desire of some Māori parents to use some of the school's surplus buildings to establish a kohanga reo (Māori language immersion preschool) on the school site. As a result, negotiations with the board of trustees of the said school (of which I was principal), the board of trustees of the kohanga reo and the Ministry of Education were commenced. The proposal came to fruition with the opening of the kohanga reo shortly after I had left the school to move to School A. All of these, and other seen face interactions with the Māori and Pasifika communities occurred because I value the cultures of Māori and Pasifika students and believe that embracing their cultural roots can be a key factor in their achievement. In my study, I recognised the importance of the seen face by explaining the project to all participants in person.

A further important issue is for narrative researchers to, "orient to the particularity of the narrator's story and voice" (Chase, 2005, p. 661). They need to be aware that participants' responses will be conditioned by cultural assumptions and that

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<sup>41</sup> Respect

environmental, organisational and institutional factors may affect what stories are told and how they are told. Narratives may be complex or ambiguous and may reveal subject positions and interpretive practices. While the very nature of a particular story may make it difficult to prepare for in advance, the researcher needs to be prepared to ask questions that invite the story to be told (Chase, 2005).

According to Clandinin and Connelly (2000) the story that is told may be more memory reconstruction than the actual recounting of events. Arising from the issue of whether narratives are fact or fiction is the question of how trustworthy the data are when gathered through narrative inquiry. Those whom Clandinin and Connelly identify as formalists, mistrust experience and narrative. They state: “Because narrative inquiry entails a reconstruction of a person’s experience in relation to others and to a social milieu, it is under suspicion as not representing the true context and the proper ‘postera’ by formalists” (Clandinin & Connelly, 2000, p. 39). Creswell and Miller (2000) outline procedures which are applicable to data gathered through narrative inquiry, and can be utilised to determine the trustworthiness of data. Of particular relevance are criteria including triangulation of data, member checking, prolonged engagement in the field, thick and rich descriptions and peer debriefing.

Because narratives are the reconstruction of experience, and all experiences are culturally interpreted, key sociocultural issues are how a researcher from a different cultural background can access participants’ narratives and the meanings they give to their experiences, as well as how their voices can be translated and authentically represented. An understanding of narrative interpretations across cultures can be developed through reflexive questioning. Questioning can relate to what types of narratives there are within the community, why the narratives are being shared, how different narratives are compared, to what extent context is needed to interpret the narratives, and the relationships between the teller, the story, the researcher and the audience (Cortazzi & Jin, 2006). Asking questions in relation to these themes assists the researcher in his/her positioning in the research.

As Clandinin and Connelly (2000) argue, narrative inquiry positions the inquirer as part of the research experience along with the other participants. How the

positioning occurs cannot be predetermined but occurs as the result of participating in the research process. Bishop (2005a) states: “The researcher cannot ‘position’ himself or herself or ‘empower’ the other. Instead, through entering a participatory mode of consciousness, the individual agent of the ‘I’ of the researcher is released in order to enter a consciousness larger than the self” (p. 120). In this study, during the interviews, my positioning was primarily as the questioner facilitating the contributions of participants to the conversations although at times contributing my own narrative. The amount of synergy between participants and myself varied from interview to interview. Previous acquaintance with the majority of students enabled prior knowledge to be utilised in these interviews, and allusions to be made to past events. The sharing of common experiences and events seemed to enhance reciprocal participation during our discussions.

### **Kaupapa Māori research methodologies**

Given that the focus of much of the research was on Māori and Pasifika students it was important that the research used methodologies considered appropriate for these groups. Bishop (2005a) outlines key principles which should be adhered to in any research involving Māori participants. It is particularly important that cultural outsiders researching with Māori are aware of these key principles.

The first is the need to address the issue of self-determination. Through long-term development of a shared sense of purpose between the researcher and the researched, a participatory mode of consciousness develops. When the researcher is open and self-discloses appropriate information the mutuality of the relationship develops. The concerns, interests and agendas of the researched and the researcher merge into one.

The second principle of *whakawhānaungatanga*<sup>42</sup> underpins the research process. Through this, a sense of kinship and connectedness develops between the researcher and the researched. Bishop (2005b) highlights the importance of “warm interpersonal interactions” (p. 119). The attributes contributing to these

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<sup>42</sup> The process of establishing relationships

interactions are said to be aroha<sup>43</sup>, manaaki<sup>44</sup>, awhi<sup>45</sup> and tiaki<sup>46</sup>. As a researcher, for example, being able to give one's whakapapa can be an important part of establishing connectedness. Fundamental to the building of a sense of whānau are certain rights and responsibilities, supports, obligations and commitments related to the attributes.

Bishop (2005a) further advises that research needs to use Māori metaphor, taking place within the discursive practices characteristic of Māori culture. An example of Māori metaphor is the laying down of a koha<sup>47</sup> by the manuhiri<sup>48</sup> on a visit to the marae. The tangata whenua may choose to accept the mana<sup>49</sup> of the koha or to reject it. In research, the researcher's proposals are like a koha. They are put before Māori who might be involved with the research project. Participants may choose to accept or reject the proposal or possibly suggest modifications which would be necessary to make it acceptable.

Finally, Bishop (2005a) argues that matters of representation and legitimation need to be addressed through a narrative approach. Interviews are important to the research process and are viewed as collaborative storying. Rather than the research process following clearly delineated phases of gaining access to data, gathering and processing of data, the research agenda is continually revisited. As a result, meanings are co-constructed within the cultural parameters in which the discourses occur. While seeking to adhere to these principles, it is questionable whether a Pākehā can ever fully understand kaupapa Māori research. Although my study is not kaupapa Māori research, the principles of kaupapa Māori research inform the narrative inquiry methodology that was employed.

A major aim of kaupapa Māori methodologies is the building of capability and research infrastructure in order to support community aims and progress. These models are viewed as potentially instrumental in terms of bringing about social

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<sup>43</sup> Love

<sup>44</sup> Hospitality

<sup>45</sup> Helpfulness

<sup>46</sup> Guidance

<sup>47</sup> Gift

<sup>48</sup> Guest(s), visitor(s)

<sup>49</sup> Integrity, status

change and transformation (Smith, 2005). This study has the potential to bring about social change and transformation. Using a research methodology that adheres to Bishop's (2005a) principles for research with Māori, significant data relating to gifted and talented Māori and Pasifika student achievement have been gathered. Through recognising and understanding the elements that have contributed to high achievement in Māori and Pasifika secondary school boys, stakeholders, working in partnership, are equipped to raise the proportion of Māori and Pasifika boys involved in programmes for the gifted and talented to parity with their New Zealand European and Asian peers.

### **Research methodologies appropriate to Pasifika**

The majority of research involving Pasifika participants has been undertaken by researchers who are considered cultural outsiders. This raises a number of problematic issues. For instance, cultural outsiders may ignore, distort or exaggerate important information thereby misrepresenting the voice of participants. They may draw conclusions based on assumptions rather than factual data and their hidden value judgements may emerge in the analysis and reporting.

As a result, some Pasifika have developed methodological practices they believe are more culturally appropriate, for example, Talanoa. According to Vaioleti (2006) Tala means: "to inform, tell, relate and command, as well as to ask...also means...to announce" and noa means "of any kind, ordinary, nothing in particular, purely imaginary or void...also means common, old, of no value, without thought, without exertion as well as dumb (unable to speak)" (p. 23). Halapua (2008) suggests that Talanoa is dialogue without concealment. Fletcher et al. (2006) view Talanoa as a qualitative, oral interactive means of researching that is considered to be authentic, having cultural integrity and providing for continuity. In this method of research, conversation is said to flow freely without being constrained by a formal structure of predetermined questions. This is considered more likely to lead to a shared sense of ownership between researchers and participants. Farrelly and Nabobo-Baba (2014) explain: "Emotions and empathy are essential elements in Talanoa methodology" (p. 319).

It is implied by Vaioleti (2006) that Talanoa can be either positive or negative. When Talanoa is positive, he states that noa makes the conditions and the space for the conversation and Tala blends participants' and researchers' experiences, knowing and emotions.

Another Pasifika methodology is *teu le va* which arises from indigenous Samoan philosophy. Anae (2010) explains:

The philosophical reference point is the Samoan concept/tenet/practice of 'teu le va' – to value, cherish, nurture and take care of the va, the relationship. This provides an essential and significant contribution to research praxis in highlighting the need for both parties in a relationship to value, nurture and if necessary, 'tidy up' the physical, spiritual, cultural, social, psychological and tapu<sup>50</sup> 'spaces' of human relationships. (p. 2)

Anae outlines a series of reference points that emphasise the relationship. These include focusing on the group rather than individuals, face-to-face interaction, the sacredness of Samoan people and the relational arrangements, and "the centrality of language and how the metaphor and nuances of language become indicators shaping/illuminating the va" (p.12).

In my own Masters research with Cook Islands Māori (Miller, 2003), my methodology reflected aspects of Talanoa and *teu le va*. In interviewing kaumatua, the broad topic on which information was being sought, was kept in mind but there was no series of predetermined questions to follow, as is typical of unstructured and semi-structured interviews. However, interviews began with two questions that were similar for each interview. The interview followed the path decided by participants, eventually discussing subtopics about which information was being sought, although not following a predetermined path. In some cases subtopics were addressed without the need to ask questions about them. The flow of conversation determined the order in which the subtopics were discussed. This approach had the intent of building trust. It contributed to the kaumatua sharing from their life experiences, including going well beyond the subtopics listed for

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<sup>50</sup> Sacred

the interviews. All interviews were face-to-face and there were also face-to-face meetings with all who completed questionnaires. Because semi-structured interviews enabled collaborative storying to occur in my Masters study, it also was appropriate to utilise this approach for this study. The interviews for this research were all semi-structured with no set introductory questions but a list of topics (Appendix 1) to be covered in the course of the interviews. As with the Masters study, on several occasions, discussions ranged more widely than the listed subtopics.

### **Synergies with narrative inquiry, kaupapa Māori, Talanoa and teu le va research methodologies**

There are some similarities across narrative inquiry, kaupapa Māori, Talanoa and teu le va research methodologies. An important way in which all four methodologies are connected is in the emphasis placed upon face-to-face interaction. It would be difficult to build the required kind of relationships between researchers and participants without face-to-face contact. Furthermore, warm face-to-face interactions prepare the way for the “collaborative storying” (Bishop, 2005a, p. 116) which is also a feature of all four methodologies. Narrative inquiry as explained by Clandinin and Connelly (2000) involves collaboration between the researcher and participants, and both the researcher and participants living and reliving, telling and retelling the stories and experiences that make up their lives. All four methodologies give prominence to the co-construction of meanings arising from the collaborative storying.

### **Approach to analysis**

While my study was not underpinned by grounded theory, it was nevertheless influenced by grounded theory in terms of my approach to analysis. Grounded theory was first developed by Glaser and Strauss (1967) who defined it as “the discovery of theory from data” (p. 1). Thornberg (2012) views its development as “a reaction to the dominant hypothetico-deductive use of ‘grand theories’ in the social research of the 1960s” (p. 85). In contrast to the prevailing methodological framework where theories were verified by quantitative methods, Thornberg outlines how grounded theory provided qualitative means by which data could be

utilised to generate inductive theories. Savin-Baden and Major (2013) detail how the beginning of grounded theory as espoused by Glaser and Strauss (1967) can be termed, classic grounded theory. Although Glaser and Strauss jointly developed the grounded theory approach to research they later disagreed about aspects of its implementation. Kelle (2005) suggests Glaser and Strauss' later work on grounded theory can be viewed as attempts to reconcile these apparently divergent ideas. As a result, what Savin-Baden and Major (2013) term, modified grounded theory, emerged. Kelle (2005) suggests that Strauss' modification focused on utilisation of a coding paradigm that was well-defined whereas Glaser's modification drew from a bank of coding families. Both forms provide a process for developing codes, categories and themes in an inductive manner.

Charmaz (2005) introduced a constructivist slant to the analysis associated with grounded theory. She argues that a constructivist grounded theory approach provides the opportunity for an alternative, "systematic approach to social justice inquiry that fosters integrating selective experience with social conditions in our analyses" (p. 510). Charmaz outlines the process occurring in the initial coding of data using grounded theory and explains how this grounded theory tool provides for an inductive process of analysis. The process begins with coding line-by-line for the main ideas. The codes are used to categorise information, and themes emerge from the categories. Charmaz argues that this coding process is a potentially valuable means for studying social justice issues such as fairness, equality, equity, hierarchy, status, democratic processes, collective and individual rights and responsibilities. The under-representation of Māori and Pasifika students in programmes for gifted and talented students is a significant issue related to fairness and equity. As alluded to earlier, Māori and Pasifika secondary school boys have been under-represented in programmes for gifted and talented students (Keen, 2004; Riley et al., 2004). Culturally fair identification procedures and effective provision for their needs in order to raise the proportion of Māori and Pasifika students involved in GATE programmes are matters of social justice and as such, fundamental to this inquiry.

The centrality of participant data in the generation of a theory is the sine qua non of constructivist grounded theory. Savin-Baden and Major (2013) state that an

advantage of grounded theory is its focus on human behaviour with the findings having their basis in participants' lives. In this study, the boys and their parents recounted stories from their lives speaking of student, parent and teacher behaviour and the impact these had on achievement.

The chapter next explains how students in this study were selected for the classes in their schools, the procedures linked to the method and the specific methods used for gathering data.

### **Selection of students for particular classes**

From the commencement of their secondary schooling in Year 9, both School A and School B placed their students in one of three bands: one (top) band, two (middle) band and, three (bottom) band. School A had four one-band classes at both Year 9 and 10 levels with classes also being streamed within the band. School B, a considerably smaller school, had one at each year level. Placement in the bands was based on evidence of academic ability. In School A, the students whom the data suggested had the greatest academic strength overall were placed in the top class in the one-band and so on through the other three classes. For Year 9, this evidence was derived from standardised and other entrance tests, data from contributing schools and data from parents/caregivers. After six weeks at school, both schools used common tests in English, mathematics, science and social studies to check on the placement of all Year 9 students. As a result of these tests, and consultation with teachers and parents, adjustments to classes were made for any student who appeared to have been misplaced. For Year 10, placements in bands and classes were decided based on academic records from the previous year as well as teacher feedback. Bands were not used for Year 11 to 13. However, in School A, where student numbers permitted, individual subject classes were streamed. This was the pattern for English, mathematics and science classes for Year 11 and Year 12 and also for English at Year 13. All students interviewed in both schools had been members of a one-band class, at least for Year 10.

## Student participant details

Following is a table detailing the pseudonyms, ethnicity (ies), dates of interviews and interview type for student participants involved in the study.

**Table 1: Student participant details**

Name	Ethnicity	Interview date(s)	Interview type
Amoho	Māori	23/10/08	Focus group
Anaru	Māori & Pasifika	28/10/08, 30/3/10	Individual
Arana	Māori	23/10/08, 31/05/10	Focus group
Atama	Māori	23/10/08	Focus group
Eruera	Māori	1/6/10	Focus group
Hemi	Māori	1/9/09	Individual
Henare	Māori	1/3/2010	Focus group
Hone Urenui	Māori	1/06/10	Focus group
Iosefa	Pasifika	1/6/10	Focus group
Isaako	Pasifika	31/5/10	Focus group
Kerisiano	Pasifika	28/11/08	Focus group
Kereama	Māori	21/4/10, 14/8/12	Focus group
Mareko	Pasifika	28/11/09, 18/5/10	Individual
Mataio	Pasifika	23/10/08, 31/05/10	Focus group
Mikaere	Māori	21/4/10	Focus group
Paora	Māori	28/4/10, 16/8/12	Focus group
Petera	Māori	23/10/08, 31/05/10	Focus group
Rapata	Māori	28/4/10	Focus group
Rawiri	Māori	2/12/08, 29/3/10	Focus group
Salē	Pasifika	28/11/08, 26/4/10	Focus group
Taaveti	Pasifika	28/11/08, 26/4/10	Focus group
Takiri	Māori	21/4/10, 14/8/12	Focus group
Tamati	Māori	23/05/10	Individual
Tamehana	Māori	23/10/08, 31/05/10	Focus group
Taniera	Pasifika	28/11/08, 26/4/10	Focus group
Tauaarangi	Māori	31/05/10	Individual
Tiare	Māori	28/4/10, 16/8/12	Focus group
Vamana	Pasifika (migrant)	1/06/10	Focus group
Werahiko	Māori	28/4/10, 16/8/12	Focus group
Wiremu	Māori	29/3/10	Focus group

## Research procedures

Prior to developing a proposal for this thesis I discussed the nature of the research I planned with the headmaster and deputy headmaster of my school, the dean of Māori in my school, the deputy headmasters and GATE (Gifted and Talented

Education) directors of the other schools involved in the EHSAS project, and a representative of the Ministry of Education curriculum division. All gave their support to the intent of the project. A meeting with a prominent Māori academic, mentioned previously, influenced the decision to bias the data gathering process towards narrative inquiry methodology, using informal, conversational-style, semi-structured interviews. All data collected from the Māori and Pasifika students and their whānau, as well as a kaumatua and iwi representative and two headmasters were gathered through interviews. In addition most of the data from teachers were gathered by means of interviews although some significant data from them were also sourced from questionnaires and classroom observations.

A significant procedural issue was to gain approval from the headmasters and boards of trustees of the schools involved in the research. In both schools, a letter about the proposed research was sent to the headmaster and board of trustees. In School A, the iwi representative was in attendance at the board of trustees meeting and discussed the proposal with me afterwards. He gave his full support to the proposal. In School B, the kaumatua was a member of the board of trustees and was therefore involved in the decision to approve the research from the outset. He was also the first person to be interviewed on my first visit to School B. This meant that he was able to gauge the suitability of the approach taken to the interview process before others were interviewed. After his interview he offered full support to the research process and was involved in recommending students for participation in the interviews.

A further important procedural issue was that interviews were conducted in a manner that was fitting for the participants. To endeavour to ensure interviews with Māori were conducted in a culturally appropriate way, I discussed with the prominent Māori academic mentioned previously, the approach and protocols necessary when cultural outsiders interact with Māori. She highlighted a number of key texts that examine this sensitive issue and advised to particularly keep in mind the principle of whānaungatanga. Heshusius (1994) refers to, “the recognition of the deeper kinship between ourselves and other” (p. 17). Linking this concept with whānaungatanga, Bishop (2005a) stated:

This form of knowing speaks in a very real sense to Māori ways of knowing, for the Māori term for connectedness and engagement by kinship is whānaungatanga. This concept is one of the most fundamental ideas within Māori culture, both as a value and as a social process. Whānaungatanga literally consists of kin relationships between ourselves and others, and it is constituted in ways determined by the Māori cultural context. (p. 118)

While not specifically undertaking kaupapa Māori, Talanoa or teu le va research, I did however, seek to honour the spirit of whānaungatanga as well as I could. I sought to convey to participants in interviews that the purpose for them was to have a conversation around issues of relevance to gifted and talented Māori and Pasifika boys. I explained that there were no set questions although I had in mind some topics (Appendix 1) which may be discussed and would allow my questions to arise from what was discussed. In this way issues could be visited and revisited in ways that participants saw fit. This approach relates to what Bishop (2005a) terms spiral discourse, a feature of research that is characteristic of whānaungatanga.

The building of trust was important in the lead-in process to conducting the interviews, the use of questionnaires and classroom observations. This was particularly important for participants who had no prior association with me before their involvement in my study. I explained that I was seeking to discover the stories of academically successful, gifted and talented Māori and Pasifika boys and to find out how effectively their social, cultural and intellectual needs were being met through their schools. All participants in interviews, questionnaires and observations were given a letter and a consent form (Appendices 3, 4, 5, 6, 7) which were discussed with them. I also explained to interview participants that, while I had a guide sheet of possible topics to cover (Appendix 1), there were no set questions. However, I was seeking to have a conversation with them around issues relating to achievement. For the boys involved in the study, it was explained that I wanted to access their individual stories. Parents were advised that I was seeking to gain further insights about their sons' achievement to supplement the information gained from the boys themselves. In addition, I

explained that they were welcome to decline to answer any questions and could withdraw their consent for use of the data gathered at any time up until the collation and analysis of data. Parents participating in interviews were invited to choose the venue and time of interviews, with all but one choosing to be interviewed in their own homes. The purpose of the research and the fact that participation was entirely voluntary was explained to teachers participating in completing questionnaires and classroom observations.

### **Methods of collecting data**

Individual and focus group interviews were the main means of data collection although, in an endeavour to enhance the trustworthiness, questionnaires and classroom observations were also utilised. The rationale and implementation of each of the data collection methods are now discussed in turn.

### **Interviews**

Interviews were considered the most appropriate means for data-gathering because they facilitate collaborative storying; a feature of narrative inquiry, kaupapa Māori, Talanoa and teu le va research. Watson (2006) views narrative methodology as particularly appropriate for the study of people with an oral tradition. Hence interviews if undertaken thoughtfully and respectfully are well-suited to groups and individuals with strong oral traditions.

Fundamentally, interviews can be divided into structured, semi-structured and unstructured formats. They can be conducted with individuals or focus groups. The unstructured, informal conversational interview dovetails best with narrative inquiry and the essence of kaupapa Māori and Talanoa research methodologies, although semi-structured interviews also enable a narrative inquiry approach to be utilised successfully. Prerequisites to effective unstructured and semi-structured interviews are; understanding the culture and language of participants, gaining trust and establishing rapport (Fontana & Frey, 2005).

Bishop (2005a) refers to the use of interviews in the context of kaupapa Māori research as a form of collaborative storying. This storying occurs in a spiral discourse where the agenda and sense-making processes of participants are

continually revisited. Bishop states: “In this way, meanings are negotiated and co-constructed between the participants within the cultural frameworks of the discourses within which they are positioned” (p. 125). Because the agenda can be changed as a result of the collaborative storytelling, participants may find the research process more meaningful and engaging than would otherwise be the case.

The strengths of using interviews include the facility to capitalise on the notion that knowledge is generated through conversations, and that the social situatedness of research data is acknowledged. Furthermore, both interviewers and interviewees are able to discuss their views of the world, and the interviews are not simply about collecting data but are an integral part of life itself (Cohen, Manion & Morrison, 2000). Cargan (2007) outlines several advantages of the personal interview over the nonpersonal questionnaire. Interviews are more readily adapted and can be applied in a wider range of situations including circumstances that are more complex, where information is sought in greater depth, and around sensitive areas. Interviews are an effective method for gathering information about beliefs, attitudes, expectations, feelings, facts, values, motives, knowledge and other social features. Participation is encouraged, with the interviewer able to repeat or rephrase questions or modify the structure of the interview.

According to Kvale and Brinkmann (2009), the advantages of the interview are heightened when the interviewer is an able craftsperson who knows how to use interview techniques and judges what forms of questioning to use in the situation.

They explain that:

A good interviewer knows the topic of the interview, masters conversational skills, and is proficient in language, with an ear for his or her subjects’ linguistic style. The interviewer should have a sense for good stories and be able to assist subjects in the unfolding of their narratives. The interviewer must continually make on-the-spot decisions about what to ask and how, which aspects of a subject’s answer to follow up – and which not; which answers to comment on and interpret – and which not. (Kvale & Brinkmann, 2009, p. 166)

Criticisms of interviews primarily focus on concerns about the types of knowledge they produce. Amongst these criticisms concerns have been raised that interview research tends to be individualistic; disregarding the individual's socially embedded interactions (Kvale & Brinkmann, 2009). This is more likely to be the case with one-to-one interviews. When the group conversations and storying typifying kaupapa Māori and Talanoa research occur, the researcher is better positioned to recognise socially embedded interactions. Interview research can be credulous, with the interviewer accepting what is said at face value rather than maintaining a critical attitude. It can be dominated by verbal language and overlook non-verbal communication. Interviews may focus on the insignificant, producing trivia rather than new knowledge (Kvale & Brinkmann, 2009). A further concern with interviews is that data may be affected by the similarities and differences between the interviewer and respondents in terms of personality, ethnicity and social class (Cargan, 2007). Issues related to my role as a middle-class Pākehā researcher have been discussed in the subsection on insider-outsider research and are further discussed in the subsection on ethical considerations later in the chapter.

During the interviews I was primarily positioned as the questioner facilitating the contributions of the participants to the conversations. However, with the students I already knew, on occasions I used my prior knowledge to allude to previous events, and at times contributed my own narrative. Analysis of the interview recordings reveals a supportive, friendly tone to the interviews and interaction with interviewees' responses. Comments such as, "Yeah, yeah," "Cool," "That's interesting," "Impressive," follow interviewee responses. Follow up questions are often used and paraphrasing of responses to clarify ideas is used at times. These encouraging responses were important in order to mitigate the influence of my teacher status and underline that I wanted their perspectives, not certain "answers".

Interview transcripts comprising experiential and biographical data were the main sources of information for the research findings. Interviews generally provided for questions to be explored in greater depth than other forms of data gathering. The headmasters of School A and School B were individually interviewed on two occasions. The senior manager in both schools with responsibility for the EHSAS

project as well as the GATE director in one school were also interviewed on two occasions. The senior managers with responsibility for the project changed in both schools as well as the GATE director in one school who changed twice. I was the GATE director in the other school. Faculty representatives from English, mathematics, science and social studies involved in the project were interviewed in a focus group setting or individually if unable to meet at the arranged time for the group interview. In addition, Māori and Pasifika teaching staff involved with gifted and talented students were interviewed as a group for their perspectives on the relevant research questions. The kaumatua of School B and the iwi representative of School A were also interviewed.

Māori and Pasifika students who had been identified as gifted or talented were interviewed either individually or in a group for their perceptions of the research questions. The students in School A were selected for interview by the GATE director in consultation with other teaching staff. They were chosen because they had been or were currently in one-band classes and were at the highest level of achievement of Māori/Pasifika students, or because they had advanced to a higher class within the one-band during the time at the school or had moved from a two-band to one-band class. One family had two brothers interviewed. Students in School B were selected for interview by senior staff members including the Head of Māori and the teacher with responsibility for Pasifika students. Senior staff was advised of the criteria I had used for the selection of interview candidates in my school prior to selecting students for interview. Students interviewed spanned the Year levels from Year 9 to second year at university. The two university students interviewed had been enrolled in a school during the first half to three quarters of the EHSAS project. Fourteen of the students, three of the parents and three of the teachers were interviewed on two occasions.

Parents of Māori and Pasifika students were interviewed individually or in family groups (e.g., father, mother and uncle) for their perceptions for all of the questions. In School A they were selected for interview because of specific special features about the stories of their sons. This included the parents of the two brothers interviewed from the one family, the two boys who had moved from two-band to one-band classes and a boy who had been placed in a one-band class as a

consequence of affirmative action. In School B the school provided me with contact phone numbers for boys who had been identified as academic leaders in Year 10 and 11. I interviewed the parents of four of these boys. I also attempted to arrange interviews with parents of two boys who had moved from two-band to one-band classes but was unable to arrange this. An uncle was also interviewed as a “parent”. Table 2<sup>51</sup> shows the number of people interviewed.

**Table 2: Interviews**

<b>SCHOOL</b>	<b>STUDENTS</b>	<b>PARENTS</b>	<b>TEACHERS (including GATE and Fac. Reps)</b>	<b>KAUMATUA, IWI REP</b>	<b>HEADMASTERS</b>
School A	18	8	9	1	1
School B	12	6	5	1	1
TOTAL	30	14	14	2	2

The interviews took place in late 2008, early 2009, early 2010 and late 2012. They ranged in length from 15 minutes to 75 minutes, the longest interviews being with parents. At the commencement of the initial round of interviews the focus was on questions related to the EHSAS project. However, when the first student interviewed spoke of the influence of his whānau on his success, and then another student spoke of his own intrapersonal qualities and their link to his success, I became aware that the most important question was not being asked. It seemed that there were elements outside of schools and teachers and the EHSAS project that may have contributed more to student success, and that in interviewing students and their whānau they should be given the opportunity to speak about what they considered had contributed to academic success. From then on an additional question was added to the study: What are the most significant elements contributing to the success of academically gifted and talented Māori and Pasifika secondary school boys? It was apparent that this question would be more likely to yield data that may be useful to educators than maintaining the

<sup>51</sup> The table shows the kaumatua recorded separately from other teachers.

focus predominantly on the project. What was not envisaged at the time was that this question would in fact become the dominant focus of the thesis. Nonetheless, relevant data from the EHSAS project have been included where they contribute to the understanding of Māori and Pasifika achievement.

### **Questionnaires**

There are many advantages in using questionnaires in research. Scott and Morrison (2007) postulate that they are appropriate instruments to use in research in both the social and natural sciences and that one can only research what is measurable and engages the senses. Cargan (2007) claims that the questionnaire is flexible because of the diversity of questions that can be asked on a given topic. Questionnaires can be very practical means of gathering data. The purpose of the research can be explained through clear instructions, and the wording of questions can be kept simple. Having all questionnaires identical facilitates comparison of data. With respondents free to answer questions in their own time, and at their own pace, there is less likely to be embarrassment and anxiety, which may occur with interviews. A wider range of people may be canvassed as well as a wider range of locations. Participants may have greater confidence in the confidentiality of information so responses may be more honest than in an interview. Because participants record their responses themselves, there are less recording errors than with interviews. With an interview, the manner, mood and personal appearance of an interviewer may influence participant responses but this does not occur with a questionnaire (Burns, 2000).

Although there are many advantages to using questionnaires, there are also philosophical, political and practical concerns related to their use. The philosophical concerns identified by Scott and Morrison (2007) relate to the lack of opportunities for participants to express their creativity or imagination and that questions tend to lack context. In order to mitigate this anomaly, all but two of the questions in my questionnaire were open ended, and questions were all related to the EHSAS project and Māori and Pasifika boys' achievement.

Some of the practical concerns about questionnaires relate to their design. There may be issues with language being too vague, ambiguous or complex, while expression of participants' points of view may be stifled by inflexible design (Burns, 2000). The design of the questionnaire in my study was not a hindrance to several teachers who went well beyond the spaces allowed in the questionnaire providing supplementary information related to some questions.

This study's 12-item questionnaire (Appendix 2) was designed to provide information on issues relating to the implementation and impact of the EHSAS project. Specifically, the questionnaires addressed:

- involvement in the EHSAS project
- perceptions of needs of gifted and talented Māori and Pasifika students
- schools' provisions for gifted and talented Māori and Pasifika students
- professional development
- pedagogy
- identification of gifted and talented Māori and Pasifika students
- effectiveness of the EHSAS project, and
- issues for teachers.

The questionnaire was administered to teachers of English, mathematics, science and social studies in one-band Year 9 and 10 classes in both School A and B. One of the advantages was that teachers are familiar with the use of questionnaires as these are not uncommon in schools. Familiarity with the layout and language of questionnaires would have reduced the likelihood of feeling threatened by being asked to participate, and may have reduced the likelihood of questions being misunderstood. In addition, using a questionnaire enabled people who could not be assembled together for interviews, to participate in the research.

The questionnaire was first submitted in late 2008 to the Head of Māori in one school, and then piloted by teachers from the English faculty because I considered they would be most likely to identify issues of clarity and accuracy. After some minor alterations to improve meaning, it was administered in late 2008, early 2009, and early 2010, towards the conclusion of the project. Questionnaires were issued by heads of faculties to teachers who were eligible to participate. A total of

25 teachers completed questionnaires out of a potential number of approximately 40, 17 from School A and eight from School B. The completed questionnaires ranged from some with brief responses and some questions not answered to those with all questions answered and comprehensive responses, including one where the teacher wrote a full-page, additional comment on the back of the questionnaire.

### **Observations**

As with any method, there are strengths and limits in using observations. The most significant advantage is that behaviour is able to be documented as it occurs. The dependence of other forms of data gathering on people's retrospective or anticipatory reports on their own conduct is avoided. As such, observations have the advantage that they enable the researcher to move beyond data based on perceptions of participants (Burns, 2000). Furthermore, observation is an excellent way for researchers to note behaviours of which participants may not be aware. Nonverbal behaviours such as gestures and postures may be noted. Observations are able to complement data from questionnaires and interviews. They can highlight discrepancies in data between what people say they will do, or did, and what they actually do (Cargan, 2007). In addition, the researcher is able to discuss factors which may not be freely talked about in interviews, and to understand better the context of situations. Observations are open-ended and inductive, bring freshness to the gathering of data, and are very flexible means of gathering data (Cohen, Manion & Morrison, 2011).

Of all the methods used in social research, Cargan (2007) considers observation is in all likelihood the most demanding. Observations may not be able to be planned at a time convenient to the researcher and they are time-consuming. Training and practice is required for the researcher to develop the skills to know what to record, and how to expeditiously record it. At any given time, the observer's field of vision is limited, and the event that is occurring may not be understood (Cargan, 2007).

An important limitation of observations would be unintentional selectivity. This invariably occurs, for example, when an idiosyncratic event is mistaken for a

recurrent one and participants' actions are interpreted in ways they did not intend (Cargan, 2007). Burns (2000) states that: "the implicit assumption behind observation is purposive and expressive of deeper values and beliefs" (p. 411). The values and beliefs of researchers will be conveyed by the types of observations that are undertaken as well as what data are recorded from observations. Scott and Morrison (2007) argue that observers bring predispositions to observations and "may see what they want to see, see what they are used to seeing and understand their observations in ways they are accustomed or predisposed towards" (p. 168). Kawulich (2005) notes that the theoretical approach of the researcher, class, ethnicity, gender and sexuality may affect how the observation is conducted, its analysis and interpretation. Citing the difference that gender can make, as an example, DeWalt and DeWalt (2002) explain that female and male researchers are able to access different bodies of knowledge, information, settings and people. Related to their ethnicity, the researcher's ethnocentricities may add to the problem of unintentional selectivity (Cargan, 2007). Acknowledging and discussing biases in advance of conducting observation and reaching agreement about the process can change the way participants respond (Angrosino, 2012).

In my study, a significant limitation of observations related to my reliance on volunteers and those nominated by heads of faculties for opportunities to observe in classrooms, thus what was observed may not have been characteristic of the GATE classes in general. This could mean that data gathered by means of classroom observations may have been distorted to form a more positive impression than was actually the case. For example, as discussed in the findings, Mataio spoke about the persistent, racist name-calling which he said occurred in multiple classrooms in Year 9 and 10. He said this was "under-the-table" so teachers did not appear to be aware of it. All of the classrooms in which observations occurred appeared to be emotionally safe places for students, including one class of which Mataio was a member as a Year 9 student. However, the world of students and their interactions are often covert and escape the attention of teachers and observers (Nuthall, 2007). The classroom, in which I observed, may have been an emotionally safe place for Mataio, at least when an observer was present, but from the interview data it is apparent that this was not

the norm for him. It is likely that the teachers being observed were amongst the best practitioners in both schools as they would be most likely to volunteer or be nominated by heads of faculties.

In this study, classroom observations added to the variety of approaches used. They had the benefit of adding important data to that gathered through questionnaires and interviews. The main purposes of observations were to view the academic challenge of lessons, assess the emotional security of classrooms particularly for Māori and Pasifika students, monitor the cultural relevance and contexts of learning, and note the participation and engagement of gifted and talented Māori and Pasifika students.

The questions below guided the observations and assisted in ensuring a focus on behaviours relevant to an effective learning environment for gifted and talented Māori and Pasifika students. Those related to academic challenge were:

- Are there any students slow to commence work?
- Are there any students who finish well ahead of others?
- How often do students ask the teacher or a peer for assistance?
- How do students respond to informal questions from the researcher about the level of challenge?

Questions related to emotional security of classrooms were:

- Is the classroom a safe place to ask and answer questions?
- Are there any put downs of other students?
- Do all students participate willingly in group activities?
- Is there any nonverbal hostility between students?

Questions related to cultural relevance and contexts for learning were:

- Do students have the opportunity to use knowledge and/or skills from their cultural backgrounds?
- Are contexts and/or content relevant to Māori and/or Pasifika students?

Questions related to engagement of gifted and talented Māori and Pasifika students were:

- Are students focused on the teacher or student who is speaking?
- Do they lean forward towards the speaker?
- Do students take notes?
- Do students ask questions?
- Do they respond to questions?
- Do they react (e.g. laugh at humour)?

Using the questions as a guide to the observation assisted in the identification of relevant behaviours. For example, indicators related to engagement that were observed were students' enjoyment of teacher humour, their involvement in answering and offering to answer the teachers' questions, as well as asking questions. Furthermore, there were comments made to me by students related to their enjoyment of the classes, courteous and focused listening to peers, as well as the teachers, and participation in group work.

I observed in one-band Year 9 and 10 classes in both School A and School B in all four major faculties: English, mathematics, science and social sciences. All of the classes included gifted and talented Māori and/or Pasifika students. Observations involved keeping running records of the class lessons and documenting evidence related to the observations' purpose, both from the lessons themselves and informal discussions with students. In School A, the teachers observed were volunteers or were asked to host an observation by the heads of faculties. In addition I observed two teachers working with senior classes because their names had been mentioned by academic Māori and Pasifika students in connection with their contributions to boys' achievement. In School B the teachers to be observed were chosen by heads of faculties. In total, 13 classes were observed, nine in School A and four in School B. In both schools, I explained to the heads of faculties that I would like to observe a one-band Year 9 or 10 class in terms of each of the four criteria previously outlined (Appendix 8). I

also gave them copies of letters and consent forms (Appendix 5) and discussed these. The observations took place in late 2008, 2009 and early 2010. A summary of the observations is shown in Table 3.

**Table 3: Observations**

<b>Year</b>	<b>School A</b>	<b>School B</b>	<b>Total</b>
2008		3	3
2009	4		4
2010	5	1	6

As stated earlier, a strength of observations is that they enable behaviour to be documented as it occurs. This meant, for almost all Māori and Pasifika students I was able to document evidence of challenge both from my perspective and that of Māori and Pasifika students, analyse the emotional security of the classrooms, and assess whether culturally relevant contexts were used, and note the level of engagement in class. However, it is acknowledged that engagement is complex and not easily defined. Nevertheless, I was able to document that almost all Māori and Pasifika students appeared highly engaged in lessons based on certain common indicators. These included answering questions, focused attention and smiling. I was also able to note that one Year 9 Māori boy seemed to lose concentration and disengage during the course of the lesson in his science class. I was able to follow up with an in-class conversation with him where he explained that he was finding Science challenging because he had not been taught Science in his primary school. This could have been a reason for his diminished concentration and focus.

### **Conclusion**

The use of interviews, questionnaires and observations, provided a range of data gathering tools to address the research questions. Since the primary methodology for this study is narrative inquiry, most of the data were gathered by means of interviews. Semi-structured interviews provided scope for collaborative storying to occur and to address the research questions in some depth. Interviews were able

to be conducted in a way that adhered to important principles of kaupapa Māori, Talanoa and teu le va research. Questionnaires and classroom observations provided alternative lenses for examining the research questions, and in some cases added information that supplemented data gleaned from interviews.

### **Ethical Considerations**

Prior to approaching any prospective participants in the research project, application was made to, and approval received from the University of Waikato Faculty of Education Ethics Committee. As noted earlier, participants included students, parents, teachers, headmasters, a kaumatua and an iwi representative. The following is a summary of a few of the main ethical issues. (Other considerations were previously outlined under insider-outsider issues previously discussed in this chapter).

Before meeting with prospective participants I needed to consider how, as a cultural outsider, I could establish a connection of trust with Māori and Pasifika participants. Of particular importance was the discussion surrounding my genuine desire that the research benefit future gifted and talented Māori and Pasifika boys and their whānau.

To ensure confidentiality as much as was possible, all students were given pseudonyms. Some students chose pseudonyms for themselves whereas others commented that they did not mind what name they were given. In addition, the school with which the students and parents were associated was not made evident. However, the school in which I taught and was GATE director would be easily identifiable because of my designation as a teacher employed while the research was being undertaken. Similarly the other school could be deduced by readers with knowledge of the EHSAS project. A number of the students made very distinctive responses to questions that I considered were important to report in the findings. Although the reporting of the findings is confidential, the distinctiveness of a few responses from students means that they may be identifiable by some readers of the research. When this was raised with the participants concerned they still gave their approval. Nonetheless, this is not an issue that is entirely

preventable. To some extent it is mitigated by the gap in time between the data being gathered and the thesis being available widening with every passing year.

Another significant ethical issue revolved around the fact that, in the research undertaken in School A, I was an institutional insider. Although observations were focused on issues related to students, invariably judgements were made about the practice of colleagues. As GATE director for School A, the “inside” information gleaned from observations had the potential to influence future decisions regarding GATE in the school. Potentially the headmaster could have viewed the observation data as having an evaluative purpose for the school. In addition, in the course of interviews, boys also made both positive and negative reference to colleagues. The key issue in all of these examples is the appropriate use of information, a consideration that Barnard (1998) identifies as an ethical foundation of classroom observation. I was particularly aware that no specific information gleaned from observations or interviews should be shared with anybody other than the interviewees or the teachers being observed. All teachers who were observed discussed the observations with me and were provided with signed copies of my field notes. After an observation I was sometimes asked by another staff member, how the observation had been. The standard response was, “It went well.” No further information was offered or requested. Moreover, my status as a teacher in the school does raise issues that cannot be neatly resolved. While I sought to put all participants at ease, as outlined earlier, my identity as a white, male teacher positioned me in ways that could be problematic, especially for those parents who had negative school experiences of their own.

### **Trustworthiness of the data**

While there are multiple perspectives in the literature about what constitutes trustworthiness in qualitative research, there is a general consensus that researchers need to be able to demonstrate that their investigations are credible. To do this they need to be able to show that specific procedures have been undertaken that increase the likelihood of the data being valid. Amongst the procedures that can be effective are triangulation of data, member checking, prolonged engagement in the field, and narratives with thick, rich descriptions

(Creswell & Miller, 2000). All of these procedures featured in the implementation of my research.

First, the data were triangulated having been gathered through multiple methods – interviews, questionnaires and classroom observations. The primary sources of data were interviews with students where both individual and focus-group interviews occurred. The interviews were also from multiple sources with parents and one uncle, teachers, headmasters, a kaumatua, and an iwi representative also interviewed.

Second, member checking occurred. All interview participants had their transcripts returned to them for checking and these were signed as verification that the transcripts were accurate. In addition, with several of the student, parent and teacher participants, further informal oral discussion of the interview questions occurred subsequent to the interview itself. It seemed that they had become sufficiently engaged through the interviews that they wished to speak further on the topics after recording had ceased.

Third, for almost half of the students there was prolonged engagement in the field as well as for three of the parents and three of the teachers. Fourteen of the students were interviewed on two occasions, two years apart. Over half of them were students in the school at which I taught and where I had oversight of programmes for the gifted and talented. Nine of these students had been in classes I taught for a year. Five students had ongoing informal contact with me over a five year period. While nothing raised in informal discussion was included in the data, the ongoing informal contact may have nurtured the relationship for those who had two interviews.

Finally, around half of the narratives could be considered to have thick, rich descriptions which would enable the reader or listener to be transported into the settings and/or situations described. Creswell (2003) states that thick, rich descriptions are characterised by detail about the settings or participants in the study which creates a sense of verisimilitude for the reader.

A factor related to trustworthiness is that even in qualitative research, participants can sometimes consider that the methodology can get in the way of their real stories being told and the researcher, in spite of the best of intentions, can assume a role which silences the real voice of participants. A participant in one of Burns-McCoy's (1997) research projects alluded to researchers using a rigid frame but this frame meant that there were untold stories that could have added richness to the research data. This is particularly salient for kaupapa Māori and Pasifika methodologies because these methodologies were developed to enhance cultural responsiveness to participants. The participants in research need to consider that their stories have been fairly heard and represented in the data and their analysis. Māori and Pasifika peoples have had a written language for less than 200 years and as such the ability to tell stories is highly prized. To rely entirely on written narratives or constricting interview processes that impinge on the telling of stories, risks the most significant stories remaining untold. The implications for this study were that I needed to convey to participants that their stories were valued and to select methods that would encourage the telling of those stories. It seems some trust was built because this study included some boys recounting traumatic events in their lives, coupled with frank feedback from boys, parents and teachers regarding schools and teachers.

### **Forms of analysis**

The influence of grounded theory on my approach to analysis of the data was alluded to earlier in the chapter. This will be revisited here along with other aspects of analysis of the data.

While I never used the interviewees' voices in order to code the narratives, I was mindful that the data provided were expressing their voices in terms of what Chase (2005) describes as subject positions, interpretive practices, complexities, ambiguities and linkages between their lives and their environments.

The narratives were coded line-by-line for the main ideas using the initial coding system outlined by Charmaz (2005). Each line of transcripts was coded for the main idea. For example the statement from a student, "Well, education is like the

biggest thing for me. I think I'm giving up sport next year," was coded, "Education main goal." The data were then placed on a spread sheet which enabled an easy comparison to be made across the responses to each question or subtopic made by students, parents, teachers, the kaumatua and the iwi representative. The interview responses were all coded on the spread sheet by the initials of interviewees and each idea was page referenced. Key points were highlighted on the spread sheet.

As with the narratives, the open-ended questions in the questionnaires were coded line-by-line for the main ideas. The data were then placed on the spread sheet which enabled an easy comparison to be made to the data obtained by means of interviews. With questionnaires, the first task of the researcher is to reduce the data to a form that is amenable to effective analysis. Before coding the data, the questionnaires needed to be checked. Checks were made for unanswered questions, that questions appeared to have been understood and that the instructions and questions had been interpreted uniformly. The two closed questions were able to be precoded but open ended questions needed to be postcoded depending on the responses of participants (Cohen, et al., 2011). The two closed questions asked respondents to identify their perspectives using numerical rankings on Likert scales. The responses to qualitative questions were collated and then coded line by line for the main idea in the same way Charmaz (2005) outlines initial coding can be undertaken with narratives.

In conducting the classroom observations I was specifically observing for evidence of academic challenge, emotional security of classrooms, culturally relevant contexts for learning and degree of engagement for Māori and Pasifika students. Data collected by means of field notes were coded by highlighting key words related to each category. Merriam (1998) agrees that highlighting key words in the analysis of events is useful. These data were compared with data from interviews and questionnaires to confirm or contradict data from these sources and build findings that were conceptually dense.

## **Summary**

This study focused on why 30 academically gifted and talented Māori and Pasifika secondary school boys had achieved highly in their schools. The boys were sourced from two state boys' secondary schools. In addition to interviewing the boys, the study gleaned the perspectives of parents, teachers, headmasters, a kaumatua and an iwi representative by means of interviews. Some teachers also completed questionnaires and were observed teaching in the classroom. Because qualitative research occurs in natural settings and attends to the lived experiences and meanings of participants' lives it was deemed to be the most appropriate approach to take. The primary methodology for the study was narrative inquiry. This enabled collaborative storying to occur between the researcher and participants. Probably the key ethical issue related to insider-outsider research was my cultural outsider status. This was mitigated by my general life and professional experience in working with and relating to Māori and Pasifika peoples. The methodology and methods utilised, enabled understandings to develop regarding the identification and nurture of the talents of gifted and talented Māori and Pasifika secondary school boys.

## **Chapter Five: The influence of whānau**

This chapter outlines and discusses the first of the key findings from the research. Dominant themes from the data are examined with the findings related to each theme discussed in turn. Most of the data were gathered by means of interview which is particularly suited to descriptive reporting. The dominant themes relate specifically to the identification and nurturing of talent amongst gifted and talented Māori and Pasifika secondary school boys, in particular with regard to student, whānau, kaumatua, iwi representative and teacher perceptions of what are the major influences on their school achievement. These relate to parents and whānau, the intrapersonal elements of students' lives, and relationships with teachers and schools. The first theme, dealt with in this chapter therefore is the influence of parents and other whānau. Through analysis of the findings it is evident that a range of components have contributed to the identification and nurture of talent. The relative importance of each of these varies from student to student.

The interplay of the three elements students and whānau identified as contributing to their success is shown in the Koru Toru Model, which was developed to give a coherent overview of the research findings. It is shown in Figure 2 to follow. The koru, literally meaning loop, is generally associated with a silver fern's circular shape in the form of a new frond. It symbolises life, growth, peace and strength. The circular shape portrays the notion of perpetual movement and the inner coil conveys the idea of returning to the place of origin. The koru is a very significant symbol in Māoridom. In the Koru Toru Model, the koru all emanate from one central point symbolising the learner. They overlap, indicating the interconnections between all three components contributing to student achievement.

The major influences on student achievement are sociocultural in nature. Barker (2008, p. 32) states that culture: "is part of the collective life of human beings, it is profoundly implicated in motivating people to act in certain ways, it is embodied in symbols and artefacts, and is intimately bound up with forms of social power."

Sociocultural learning theory is a significant theoretical lens through which the findings are viewed.



**Figure 2: The Koru Toru Model (Miller whānau, 2014)**

### **Results**

During the course of interviews with students, elements that they perceived had contributed to their success at school and in life in general were discussed. Twenty-two out of the 30 students interviewed spoke of the part their whānau had played in their success and identified the most significant influences. First, there was the value placed on education conveyed through whānau heritage and role modelling. Second, the expectation to achieve was discussed as demonstrated through motivational talks and the assistance given with academic work. Third, was the nurturing nature of whānau shown through unconditional love, religious beliefs, values and moral codes of the family, and the use of informal

opportunities to teach. All of these elements overlap and reflect sociocultural processes. A fourth component was the natural endowment that students received by virtue of being born into a particular whānau.

### **The value placed on education**

The 22 students who identified their parents as having a positive influence on their achievement appeared to belong to families where education was valued. The link between the importance the family placed on education and high academic achievement was highlighted by a deputy headmaster. When questioned regarding the most significant practical educational issues for Māori and Pasifika students he commented:

I think the biggest factor is how much education is valued in the home in terms of the sort of hierarchy of things that are sought for. In Western society, education is valued very, very highly and it is certainly valued above, for example, family relations, whereas, for Māori and Pasifika students, for families, then whānau issues and family issues are probably more important. You know, they come first and so it's a matter of getting families to recognise the importance of education and therefore valuing it highly enough to make it a priority in the home. Different cultures have obviously, a different value base that they are working from, and a different world view and it's certainly not to say that that's wrong but it is to say that it is different, and it might be at odds with what we are trying to do with such a high focus on education.

The deputy headmaster also considered that negative attitudes to education may be the result of disillusionment with the parents' own schooling, and possibly a feeling of marginalisation caused by the education system. In addition, he commented on the detrimental effect on Māori and Pasifika students' achievement of frequent absences from school for family-related issues. He thought that Western Europeans were likely to place a higher priority on education than family relations. In contrast, Māori families were perceived as likely to prioritise family relationships above education. Māori families were therefore believed to be more likely to have their children absent from school for family matters.

It is interesting to note that the deputy headmaster's view is in contrast to the experience of many of the participants. From the interviews with 22 gifted and talented Māori and Pasifika students, and some of their parents, it appears that these families managed to make both whānau and education high priorities in the home. One student, Anaru, a student of both Māori and Pasifika ancestry, commented that he felt pressured by his parents not to fail and this pressure had worked in his favour. For example, he progressed straight from school to second year university study in his major subject, gaining A grades in this and his first-year papers. He stated that he could not wait for university to get harder and was already planning towards future PhD research. Anaru had also run his own business since he was in Year 10 at school and continued to do so at university. He traced his academic success, and the success of the two generations in between, to his Māori father's koro<sup>52</sup>. Anaru elaborated:

My father's koro used to live in the bush, quite the Māori, but he decided at that point he could see that Māori in their current state living in the bush wasn't going to work when we try to integrate with Pākehā. So, he knew the way Pākehā people were going for good education so he pretty much took my koro's family on the East Coast for 14 months, and put them in a good education. They turned out successful so now they've got their own businesses. Comparing them to my dad's second cousins, their families didn't turn out as well as ours because we could see that education was the way.

Not only did Anaru's family apparently value education but they also, from his comments, put a high priority on meeting the needs of family. Anaru spoke of the way money his family had set aside for his university education had been diverted into meeting the needs of his grandparents. They were no longer able to care for themselves so they had moved into his parents' home resulting in the need to make expensive modifications to the bathrooms, and other parts of the house. Anaru said he was more than happy to help his grandparents, and he had not

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<sup>52</sup> Grandfather

needed the money anyway because his first two years' university fees had been completely paid by scholarships he had won.

One way that the value placed on education was demonstrated was by the modelling of achievement. In addition to Anaru, whose academic success and business acumen had evidently been modelled by his forebears, several Pasifika students spoke of the motivation and inspiration from their fathers. Salē spoke of the effect his father's modelling had on him. He stated:

My dad didn't pass school. My dad dropped out before high school even. He wasn't quite the best role model but he started uni. He wanted to be more than he just was and that's what he taught us, to be the best you can be. Going to uni. and getting a Master's degree in Business Management was quite something to be proud of and to look up to, you know, someone we could be like in the future. It's inspirational to us as kids and our family to look up to our dad, and that kind of shows us what you can do. Don't just settle for being a simple floor man employed at The Warehouse. Look to be the boss of The Warehouse.

Another Pasifika student, Taniera, recounted how his father was inspired by the example of Salē's father. He too had gone to university and was then working on a Master's degree in Business Management. Taniera spoke of how his father, like Salē's father had not completed school. He had left school and returned about four years later as a student in the same class as his little brother. Taniera described how his father was then motivated and focused on achieving academic success stating, "he's kind of put that on to me, and the same with my brothers as well". A third Pasifika student, Taaveti spoke of being inspired by his father and wanting to be like him (his father was a medical specialist). The three Pasifika boys had fathers who were role models of academic achievement.

From the comments of the students it seems that parents, and particularly fathers, who achieved academic success, had a powerful modelling influence on their sons. From the comments of students in this study this was more evident amongst Pasifika students than amongst Māori.

### **The expectation to achieve**

There were many families where there was no mention of a role model of tertiary academic success within the whānau but whose boys were achieving highly. Nonetheless, most of these parents wanted their sons to achieve academically because they viewed this as important for their boys' future and sometimes, also for the future of the family. These parents still played a role in motivating their sons to achieve highly by conveying to them the expectation that they would achieve highly through verbal encouragement and admonition. Mareko and his parents spoke of how there were daily talks, or as Mareko described them, 'lectures' about the importance of doing well at school. Several boys spoke of being pushed by their parents and/or other family members. Two of these boys, Tauaarangi and Isaako, said that no one in their family had ever gone beyond school to study successfully at the tertiary level, but the push from home had been a major factor in their success at school, and their goal to attend university. Although no boys mentioned their mothers as role models, several commented that it was their mothers who kept on reminding them of school work that needed completing, and the need to study. For example, Hemi, who had a self-confessed casual attitude to his schooling, usually completing homework the night before it was due, remarked that his mother, "always pressured me to do homework". It seems she can take a share of the credit for his academic success at school, and the success he later enjoyed at university.

Several students spoke of ways their parents and siblings had helped with their academic work. This was another way that the expectation to achieve was conveyed. For example, Vamana outlined how he had migrated from his Pacific Island homeland at the start of Year 10 and arrived at his New Zealand school the first day, never having held a conversation in English with anyone. School entrance tests placed him in the top class for his year level from the commencement of his New Zealand schooling. From Vamana's account, initially the work was very hard for him. To gain a better understanding of what had been taught at school he would go home and study his notes and seek out the help of his father and sister. It seems that working as a team, the family helped him at night to understand the things he had been taught during the day. On completion of Year 11, Vamana gained around 150 Level 1 credits in the NCEA, including a

few at the Merit level. He acknowledged the significant part his father and sister played in his success by helping him understand what he had been taught.

### **Nurturing nature of whānau**

It was apparent from the parents who were interviewed that they loved their sons unconditionally, and were willing to consistently make personal sacrifices in order for their sons to have opportunities to achieve. For some this was demonstrated by providing access to the required resources to enable students to learn. Most families, for example, had access to the Internet but those that did not made sure they compensated in other ways. For example, Tiare's mother brought her laptop home so he had access to the Internet. Mataio's parents took him to Internet cafes and the town library to give him access to the resources he needed. In a similar way to Mataio's parents, Mareko's father regularly drove him to the university to study in the library from the time he was in Year 10. He explained that his parents would get anything for him that he needed to help with his academic work. Furthermore, Mareko remarked, "The best help for me, the biggest part that has helped me get to where I am now is the love that my parents show towards me. Without their help I wouldn't be where I am now".

Unconditional love was also shown by several of the parents I interviewed in terms of the importance placed on giving their sons their time. Hemi and Henare's father considered that one of the factors contributing to the academic success of both of his sons was the support he and his wife gave. He described the travel, time, coaching and umpiring commitments associated with his three children's weekend sports activities. Hemi and Henare's parents also watched Henare in his kapa haka performances on a regular basis. Henare alluded to his parents' dedication to meeting the family's needs and 'always' being involved in their school, sporting and cultural lives.

For several families, the religious beliefs and values within the home appear to have been part of their nurturing and impacted on the boys' achievement. From the interviews it seems that the church influenced the home lives of most Pasifika students. Religious affiliation was an influence in the life of at least one of the

Māori students. In the homes where the church was not mentioned as a specific influence, several students spoke about the values the family held to be important and how these were conveyed to them by their parents.

Mataio and his mother, a Pacific Island immigrant, spoke in some detail about how their church had been influential in his life. Mataio's mother also commented on the influence of the church in the lives of her other children. She spoke of the weekly family home evenings that are part of the culture of the church. Mataio's mother outlined how the whole family met together on these evenings including those who were married, and had children of their own. She described how these evenings were utilised to encourage the older children to be good husbands and fathers, wives and mothers. For the younger children, the focus was on encouraging them to achieve more highly at school and making sure they did their homework every night. Mataio's mother also spoke of how the leadership of the church had recognised the talent of Mataio in public speaking, and given him the opportunity to bless the sacraments and speak to the congregation. Her comments indicated the church boosted the self-esteem of Mataio and encouraged him in developing and utilising his talents.

Two of the four students I interviewed, who began their secondary schooling in a middle-band class and later moved to a top-band class, considered their religion had played an important part in their success. Hone Urenui spoke about the way the beliefs of his church had influenced his thinking and actions. He stated, "One of the beliefs for my religion is that what we learn in this life carries on to the next life where there is even more learning to be done". He explained how this belief had helped him to study and persevere, including at the time of interview when he was coping with significant personal and family trauma. Mareko, and his Pacific Island immigrant parents, spoke of how his church had contributed to his spiritual life, keeping him calm, giving him patience, giving him direction and keeping him focused. Mareko elaborated:

Going to church, having that spiritual belief, it just really calms me. It gets me focused and actually keeps me happy, you know. When people usually think about school, it's really boring and you don't really get much enjoyment out of it. Going to church really helps me to appreciate life and

school. It's the environment I'm in at church. It's a friendly environment, you know, and you just feel at home and, you sort of, bring that attitude from church into school and wherever you are.

While Vamana commented on several factors which had contributed to his success, he attributed divine guidance as being the most significant factor, stating, "I think the most important thing is because I'm a Christian. When I get a test, the first 10 seconds I pray and ask God to give me something to write on the paper". The theme of divine guidance also was evident in a comment made by Salē who was disappointed in initially not being placed in a one-band class but accepted this because he thought that God must not have wanted him to be in a one-band class. Evidently this did not stop him striving to achieve and the next year he moved to a one-band class.

It seems from the comments of interview participants that most of the highest-achieving Māori and Pasifika students came from families with a strong values base. Some of this is framed within an overtly religious belief, but not for all. The following outlines examples of how parents actively sought to impart their values to their sons. Wiremu remarked concerning his father, "A big thing, I guess is he's led by example for me morally, as well as a man, in terms of teaching me about right and wrong. I've had it easy because he can tell me but he shows me at the same time". Hemi and Henare's parents spoke of the way values were imparted to their two high-achieving sons who had been brought up in what they described as a caring, but not materially wealthy home environment. They talked to their sons about people who were worse off than themselves, and emphasised the privilege of being able to attend the school of their choice when living outside the school's zone. Hemi and Henare's parents also mentioned how they always fully supported their children's school, sporting and cultural involvement. They apparently conveyed to their sons how special they were to them as parents. In speaking of the encouragement from his parents, Henare remarked, "They're always telling me to do my homework. They're really supportive of anything I do. At primary and intermediate school they were always the parents who came in to help out. I think that helped because there was the expectation that if they were going to put as much effort into me as they did, I should work hard too".

In addition to outlining the strong values base imparted by his father, Wiremu recounted in detail how his father used informal opportunities to engage him in learning. He spoke of the way his father would take him everywhere with him, for example, on the farms on which the family lived. Wiremu explained how his father would be mindful of opportunities to ask questions that would teach him. Wiremu's father would ask Wiremu why a particular action should be taken and ask for an explanation of why that action was being taken. He would play engaging games with Wiremu, challenging him to learn new information and skills. One incident that Wiremu recalled was when, as a small child, he was splashing round in the bath, and his father told him about how Archimedes' Principle was demonstrated by the water being displaced when he was in the bath.

Wiremu achieved well at school gaining 35 Excellence credits at NCEA Level 2 in Year 12 and subsequent to the school interviews, successfully completed Year 13, then completed his first year of Health Sciences at university and was accepted into Medical School. He was asked the question, "If we look at how you've succeeded academically, can you think of any particular reasons you attribute that success to"? His response was:

I'd say my dad, when it comes to a lot of my success for the person I am today. He's just always pushed me in the right direction but not in a forceful way. He's sort of always been the guiding hand for me. I attribute a lot of the man I am today to my dad just because of the fact that he is, and he raised me really well.

### **Natural endowment**

Aside from the part the whānau played through the value placed on education, high parental expectations and the nurturing environment they provided, a fourth significant element the students commented on was the natural endowment they received. Natural endowment refers to the attributes individuals inherit from their parents' and other ancestors' genes, and traits that are present at birth as a result of the intrauterine environment (Simonton, 2008). In this study seven students attributed their academic success, at least in part, to their natural endowment,

whether this was viewed as resulting from divine activity or chance. For five of them, from their perspective, natural endowment was one of multiple components related to their success in developing their academic talents. In contrast to these five (who attributed their success, at least in part, to the home and/or school environment, and/or intrapersonal characteristics), there were two boys who attributed their success to other factors, primarily that they were born gifted or talented. For instance, Rapata remarked:

I don't have influences. I just do work and this is where I've gotten. I was born with natural talent, Sir. I'm just in a class and I can't wait for the class to be over so I can go to lunch time. Before tests and stuff, that's when I start to settle in. I'm just like, 'Yeah. I want to go hard at this test and do well.' I just do it, I guess. I don't know how. I am naturally talented.

Furthermore, he described his approach to test preparation: "I usually just grab a bunch of notes off the Internet for a test or something and I will just run through them 10 minutes before". Rapata's Year 9 English teacher described how he was notorious for not completing homework but had a wide vocabulary, wrote fluently and structured his writing well. At the end of Year 9 he moved to a higher class in English within the one-band.

The following narrative about Tamati outlines his approach to his school work and the place of genetic endowment in his success. Tamati described himself as "one of the laziest students around". He described how he did little study out of school spending most of his time, "lazing around home or hanging out with friends". Tamati had frequent absences from school, openly discussing his rebellion against the school's uniform rules, conflict with the deans and truanting from school to catch up on completing assignments. In fact it took me three months of my regular weekly data gathering visits to the school before I managed to find him present at school in order to be able to arrange an interview. From the start of Year 9 he was placed in the top Year 9 class and he continued in the top Year 10 class the following year successfully completing three NCEA Level 1 subjects a year earlier than the norm. When asked the question about what had contributed to his academic success, Tamati responded, "Most of it, to be honest, is just general intelligence like the fact that I'm one of those lucky people who

happen to be smart, yeah, just born intelligent and reaped the rewards from it". It seems he viewed natural endowment as the major component involved in his success. He described how other members of his class studied for important tests or examinations three to four weeks in advance but he studied three or four days or perhaps just the weekend before. He said he managed to complete all the study he needed to do in the time he allowed because he crammed "slightly strategically". He recounted how he completed an NCEA history assignment:

I just took two days off school and spent both of those days at the library. I got all of the information. I went through all of the stuff I'd photocopied, highlighted through it, flicked it all in a folder, went on a computer, did lots of typing, did a little article, flicked that in, came in half way through the last day of school, dropped it off with my teacher and then I headed off home. It turns out that I got Excellence and Merit for that and half the class got Achieved and Merit. They were really annoyed at me.

Tamati elaborated further indicating that he did not really work in class, but was there to have a good time talking to the person next to him. He commented that being at home without other students around, was the easiest place to learn because he could be free from distractions. For Tamati, academic success appeared to be less about the home and school environments, and more about his innate ability and learning strategy.

Another example of a student who acknowledged he did not work hard was Hemi. He attributed his achievement to "a good memory and a lot of luck". He indicated that when he entered his secondary school his sports and social life were his main focus. Academic studies were described as "taking a back seat". The entrance tests and data from his contributing school placed him in the top Year 9 class. His mother explained her surprise at finding Hemi had been placed in the top class. She said that he had chosen to go to the school for a variety of reasons, none of which had anything to do with education. Such was his mother's surprise at his selection for the top Year 9 class; she and her husband went to the school to check that, "he was the right child". In spite of the low priority given to academic success, he achieved well enough to gain entry in the top Year 10 class the following year. He went on through the rest of his schooling passing everything

that was required, including gaining some Merit and Excellence grades along the way but stated, “For me it seemed like a pass was good enough”. Unlike most other academic students, he avoided the Cambridge International Examination pathway that teachers generally considered was more academically rigorous than the equivalent age level NCEA system. Hemi confided that although he had not pursued academic success as a priority at secondary school, he did enjoy the recognition and approbation he received from his peers for being viewed as a top academic student. At the time I interviewed Hemi, he had completed his first year at university gaining marks in the B+ to A- range on average and from his comments, felt comfortably positioned in the top quarter of his classes. Hemi spoke of the way he simply turned up to class and retained what he was taught. From his account he was lucky, and born with a good memory that enabled him to succeed even though study had been a low priority in his life.

Hemi’s younger brother, Henare, also acknowledged natural endowment as an element associated with his achievement stating “I’ve always been quite gifted I think”. His primary school had apparently recognised his giftedness so he was promoted in primary school, skipping one year level. In contrast to Hemi, he evidently worked hard in order to achieve highly. From his parents’ comments, he seemed to relish academic challenge. Unlike Hemi, he embraced the extra challenge of the Cambridge International Examination courses. Both he and his brother appeared to be gifted, but based on examination results, Henare achieved more highly than Hemi at high school. Comments from his parents suggest that both natural talent and hard work played their part in his achievement.

Although Petera did not attribute his academic success to being born gifted, his father considered part of Petera’s success was due to inheriting the intellectual genes from his grandfather. He cited Petera’s grandfather achieving honours in Latin, Māori and English at his secondary school, and after leaving school, training to be a doctor and a teacher. Petera’s father explained how he had sung waiata to him in the womb, linking this to the ease with which he learned te reo Māori. Petera, as a small boy, would go with his father to a Technical Institute where he was taking Māori Studies. Although, not part of the class, Petera’s father said he learned the chants and would come home and rehearse them. He

reportedly adapted quickly to learning te reo Māori after being enrolled in a kura kaupapa Māori<sup>53</sup> as an eight year old. Throughout his secondary schooling he was top of his year level in te reo Māori and at the time of his second interview was studying Scholarship Māori in Year 13.

Another student, Takiri, attributed his academic success in part to “natural ability” and Kereama partially ascribed his success to being “academically gifted”. While both Anaru and Vamana attributed their success to multiple factors they specifically mentioned the influence of God in giving them their abilities. As already mentioned, Anaru was of joint Māori and Pasifika heritage and Mareko was of Pasifika heritage. While Mareko spoke at some length about his church connection, Anaru never mentioned this. From the seven students’ comments there is an indication they recognised the importance of their natural endowment in giving them ability to achieve academically.

## **Discussion**

Family influences are described in some research literature as the pre-eminent or most potent factors influencing student achievement (Biddulph et al., 2003; Freeman, 2000; Henderson & Berla, 1994; Macfarlane et al., 2014). While others may not view family influences as the pre-eminent factors, they nevertheless view them as very significant (Israel et al., 2001; Olszewski-Kubilius, 2008; Walberg, Williams & Zeiser, 2003). This is the case regardless of whether the family is defined as the nuclear family or the whānau that characterises many Māori and Pasifika families. Research in New Zealand (Biddulph et al., 2003) suggests that generally children in nuclear two-parent families will achieve more highly than children in other family structures including those from two parent families where additional adults are also living. The students I interviewed primarily came from two parent families. However, there were variations with three students living with a solo mother, another living with a solo father, one with an uncle living with the family, another with grandparents living with the family and one where a whānau group of 12 people lived in the household. Taniera explained that the latter family grouping was formed because cousins around his age had come to

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<sup>53</sup> Total immersion Māori language school

university that year, and as they had no place to stay, they and their babies were invited to stay by his mother, demonstrating her typical Pacific Island hospitality. What is noteworthy is that students from these diverse types of family structures were all succeeding in the academic field. A very high proportion of students (22 out of 30, several of whom were not in two-parent nuclear family households), identified family influences as major contributing elements in their achievement of academic success. From this study, it appears that family structure in itself may not be the important issue. Indeed, Rosenzweig (2000) found that providing structure in the home had a zero effect on student achievement. Other components, such as the ability to provide access to needed resources and making adequate time for children are deemed by Biddulph et al. (2003) to have a greater positive impact on students' achievement.

While the importance of the whānau in developing and nurturing student gifts and talents is acknowledged, the relative importance of whānau influences on the achievement of secondary school students is subject to debate. Research undertaken through the Te Kotahitanga project in 49 New Zealand secondary schools provided significant data indicating differing perceptions from different groups about the relative importance of whānau influences on Māori student achievement (Bishop et al., 2014). The majority of teachers viewed the major influences on Māori student achievement as the students themselves, their homes and/or school systems and structures. By contrast, students, whānau and school principals considered the quality of relationships in general within the educational community and, in particular, between teachers and students as the most influential factors in Māori student achievement. It was claimed that many of the teachers viewed Māori students and their homes in deficit terms and underachievement was created by forces teachers felt were beyond their control and influence. This issue will be examined further under the discussion of the influence of schools and teachers in Chapter Seven.

### **The value placed on education**

It is apparent that 22 of the 30 students I interviewed came from families that placed a high value on education. From the accounts of the boys' parents that I

also interviewed, they provided environments supportive of making education a high priority in their homes. The importance of families of gifted and talented students valuing education is supported by the literature (e.g., Freeman, 2000; Hébert, 2011; Macfarlane et al., 2014). Hébert (2011) posits, “Success in school will be more likely to occur if parents value education” (p. 126). Freeman (2000) refers to families as “the essential context for gifts and talents” (p. 573). Henderson and Berla’s (1994) comprehensive meta-analysis concluded that:

The most accurate predictor of a student’s achievement at school is not income or social status, but the extent to which that student’s family is able to:

1. Create a home environment that encourages learning
2. Express high (but not unrealistic) expectations for their children’s achievement and future careers
3. Become involved in their children’s education at school and in the community. (p.15)

The 22 students in this study who identified the significant contribution to their success made by the whānau, all described in some way how their parents encouraged them to achieve at school. While Goertzel and Goertzel (1962) in their study of 400 eminent figures of the twentieth century used a different methodology for their research and studied an entirely different group of people, their findings link with the findings of this study which were based primarily on interview data from students and parents/caregivers. Goertzel and Goertzel derived their data from written biographical information. They found that over 90 per cent of their research subjects were from families that placed a high value on learning and achievement. They stated, “It is then, the family value system which seems to have the strongest impact on the child with ability. If his parents respect ability and have strong intellectual and physical drives, he is evidently more likely to become outstanding among his contemporaries” (p. 27). Goertzel and Goertzel are careful to point out that placing a high value on education is not synonymous with loving school. In fact, many of the individuals they researched had parents who did not care or were negative about formal schooling, and several of the subjects of research did not even attend school. Their love for learning had apparently been caught and taught through the home environment.

In contrast with many of the subjects of Goertzel and Goertzel's study, the boys involved in my research almost all enjoyed school. This was certainly the case with the great majority of the 22 students who indicated their families had played a significant part in their success. Their enjoyment of school may well be linked to their parents' positive attitude towards school. Certainly almost all the comments parents made about their sons' schools were extremely positive. The education system has changed since the world of the late nineteenth and early twentieth centuries when the subjects of Goertzel and Goertzel's research attended school. Although there is some way to go in making appropriate provision for the diverse range of gifts and talents manifested by students at school, there is arguably, now a greater awareness of the need to provide teaching and learning experiences appropriate to different learning preferences and all levels of ability. The great majority of boys involved in my research seemed to combine a love of learning with a love of school. Nevertheless, there were three students, who from their accounts, achieved well despite not being engaged at school.

Changes in the education system are only a partial explanation for the differences in attitudes to school. In some cases the eminent people researched by Goertzel and Goertzel (1962) were not recognised for their abilities when at school. In a similar way, the greatest future achievers from School A and B may not have been interviewed during the course of my research. For example, administering *Ravens' Progressive Matrices* (as part of the EHSAS project) with selected students who were identified as possible underachievers, it was revealed that three Māori boys in two-band classes were achieving at the 99<sup>th</sup> percentile or higher. All three boys were reluctant writers and had difficulties with personal organisation including time management. Because of the school system's emphasis on being able to write well and the need for organisational skills in order to achieve well in assessments, the boys were not revealing their potential academic capabilities through the school's assessment procedures. What might these boys achieve when they move outside the constraints of their secondary schools and their abilities can be evaluated without heavy reliance on written testing under time pressure?

Another study that reflects similar findings to those of Goertzel and Goertzel (1962) is Moltzen's (2005) research into the lives of eminent gifted New Zealand adults. He identified family background as a strong feature that influenced the high achievement of these individuals. It was significant that most of these eminent people did not come from backgrounds with well-educated parents or socio-economically advantageous circumstances. However, in spite of the home circumstances these parents provided their children with, "a stimulating early environment" (p. 208). One of the ways stimulus was provided was through having plentiful books available for children to read. Parents also "modelled the personality traits often considered essential to the realisation of talent" (p. 208). The values of a strong work ethic, task commitment and perseverance were articulated and modelled by parents.

Similarly, the story of the famous African American neurosurgeon, Doctor Ben Carson provides an example of how his mother, in spite of living in poverty, placed a high value on her sons' educational achievement. She modelled her parenting on a strong work ethic, task commitment and perseverance, and expected these characteristics to be shown by her sons. Although illiterate herself, she insisted on her sons achieving highly at school, restricting their television viewing and making weekly visits to the library for her boys to borrow books to ensure a love of reading was developed (Carson, 1990).

Seven of the 14 parents I interviewed commented on the fact that they were not wealthy, and made other comments related to struggles with financial commitments. While I do not think any of the Māori or Pasifika boys I interviewed lived in conditions that resembled Ben Carson's upbringing by a young solo mother in inner-city Detroit, it was quite apparent that several of the boys were being brought up in situations manifested by socio-economic challenges. At least one person in this study was motivated to achieve, at least to some extent, by the desire to escape the 'poverty trap'. Certainly, all the parents of the boys I interviewed seemed committed to providing the best possible educational opportunities for their sons to succeed. They went out of their way to ensure their sons had access to the resources they needed and several (indeed

probably most) made significant time commitments. Both of these important elements contribute to achievement, according to Biddulph et al. (2003).

It was significant that several of the Pasifika boys in my study identified their fathers as their role models because of their attitude to academic achievement. The boys in the research project with supportive fathers commented that they were role models who demonstrated their care towards them, and highlighted the importance of education. It seems that, in several homes, the modelling of fathers has a positive effect on achievement.

### **The expectation to achieve**

The comments of all 14 parents I interviewed conveyed the expectation that the boys would achieve academic success. From several of the boys' accounts, this expectation had been clearly conveyed to them. Not only were students expected to achieve, but also the requirement of a strong work ethic, task commitment and perseverance was articulated, and possibly modelled, by parents from the homes of 22 of the 30 boys. It seems the parents were encouraging their sons to succeed, not only at school but also in tertiary education and beyond. This finding aligns with Macfarlane et al.'s (2014) study where the whānau clearly conveyed to their teenagers the message that they were expected to work hard. As with Ben Carson's mother, the commitment of the parents I interviewed to their sons' success did not appear to necessarily be related to their own educational level. Many of the parents of the gifted and talented group of boys in this study did not have formal educational qualifications but they nonetheless expected their sons to achieve highly. For example, the lectures Mareko received from his father were indicative of his parents' commitment and persistence in encouraging his achievement. Interestingly, Catsambis (2001) states that habitual parent-teen communications about school related matters have been found to be negatively associated with educational outcomes. However, this is apparently likely to be the result when communications have a negative focus such as academic or behavioural problems. It seems that Mareko's parents and those in Macfarlane et al.'s study had avoided a negative focus with consequent benefits for their children.

It is apparent in this study that parents had high aspirations for their sons and high expectations which contributed to achievement. This was particularly evident with the three Pasifika immigrant parents whom I interviewed. What was noteworthy about these three parents, and also others in this study was that their expectations of their sons' achievement were not adversely affected by the low socio-economic status (SES) of the family. These findings run counter to Stull's (2011) study which found that anticipated achievement was related to socio-economic status. Furthermore, parental expectations related not only to achievement at school, but also beyond school. Stull's study showed that highly-achieving children's parent-predicted qualifications beyond school were strongly associated with socio-economic status. Data showed 86.4% of highly-achieving, high SES students were expected to earn a Bachelor's degree or higher. However, 60.4% of highly-achieving, low SES students were expected to achieve at this level.

The study findings of Biddulph et al. (2003) also outlined the significant negative impact poverty appears to have had on whānau expectations and student achievement in New Zealand. At the time the Biddulphs' data were gathered, one fifth of New Zealand families were reported to live below the poverty line. Furthermore, the incidence of poverty in Māori families was two and a half times greater, and in Pasifika families three times greater than in Pākehā families. In spite of coming from situations of low socio-economic status, there were many individual high achievers in the Biddulph et al. study. Sirin's (2005) meta-analysis of 58 studies involving 101,000 students found that students experiencing poverty generally achieved lower than those from more socio-economically advantaged circumstances. Poverty in fact accounted for up to 60% of the variance in standardised test scores. However, rather than simply identifying poverty as the reason for the lower achievement level of children in situations of low socio-economic status, it is helpful to consider the specific ways poverty affects achievement. For example, in Biddulph et al's study there were particular family elements that appeared to have had a negative impact on achievement. These included limited resources within the family, the emotional climate and limited aspirations that did not foster achievement at school. Parents have their own perceptions of school which have been shaped to some extent by their personal

experiences. If their experiences were negative it is easy to pass on that negativity to their children. If they underachieved they may also expect their children to underachieve. The parents' values, aspirations and expectations are conveyed to their children in the day-to-day spoken and unspoken messages they give about school.

In this study it was apparent that the majority of parents expected their sons to achieve highly and actively provided the resourcing and support they needed to achieve. Furthermore, the boys themselves appeared motivated to live up to their parents' expectations. However, there is conflicting data from the literature on the impact of parental expectations on student achievement. Some studies found that the achievement of Latino American students in the United States did not appear to be influenced by parental aspirations or expectations. For example, a study of 1050 12<sup>th</sup> grade Latino American immigrant students undertaken by Carpenter (2008) with regard to parental aspirations and expectations, and the learning of mathematics found that "parental expectations and aspirations were not significant predictors of student achievement" (p. 164). However, both prior performance and hours spent on homework were predictors of student performance. Another study undertaken with Latino American immigrant parents (Goldenburg, Gallimore, Reese & Garnier, 2001) also found that parental expectations were not accurate predictors of student achievement. This longitudinal study sample involved 81 students from kindergarten to middle school in the Los Angeles area and was focused on Spanish language reading instruction. It seems however, that parental expectations were not consistently high, but tended to rise and fall depending on how the students actually achieved. A further study of Latino American students (along with European American, African American and Asian students) examining parent aspirations was conducted by Hong and Ho (2005). They too found no link between parental aspirations and student achievement amongst the Latino American students although there was a link with the other three ethnicities. The question arises as to why no link was found between parent aspirations and/or expectations, and Latino student achievement in these three studies.

Perhaps a partial answer to the question can be found in a finding of Goldenburg et al. (2001). Regarding the parents of the students in their study, they reported that: “They had high hopes for their children’s eventual academic attainment but had little knowledge about what they could or should do to act on those aspirations” (p. 577). In the Carpenter (2008) study, the parents had very high aspirations for their children’s tertiary education, 25% expecting them to complete a PhD or MD or equivalent and 45% expecting them to complete a four-year degree. The United States Census Bureau (2012) indicated 13% of Latinos of 25 years of age or older had a bachelor’s degree or higher compared to the total population of 27.9%. However, to simply consider Latinos as one homogeneous group is to ignore the wide range of achievement evident amongst Latinos from different countries of origin.

In contrast to the aforementioned studies (Carpenter, 2008; Goldenburg et al., 2001; Hong & Ho, 2005), a study by Catsambis (2001) of students at secondary school level (including Latino) concluded that parents’ expectations of high performance had a positive effect on the achievement of their children regardless of ethnicity. In her study, high parental expectations were linked with consistent encouragement and actions taken to enhance learning opportunities. Aldous’ (2006) study of immigrant students from Latino, Asian, Pacific and European backgrounds found that for all ethnicities, the students whose parents had high aspirations for them achieved more highly in reading and mathematics tests. From their synthesis of the literature, Zhang, Haddad, Torres and Chen (2011) concluded that in general, research evidence shows that high parental expectations foster adolescent achievement regardless of the students’ ethnicity. Moreover, Wang and Benner (2014) state: “empirical studies document that students whose parents have high educational expectations are more motivated and engaged at school, earn higher grades, have higher achievement scores, and attain more education” (p. 891).

It seems that in general the literature is more likely to establish a link between parent expectations and student achievement than to find no connection. Perhaps, the reason why Latino parental expectations in the Goldenburg et al. (2001) study and possibly the studies of Carpenter (2008), and Hong and Ho (2005) did not

reflect improved student achievement can be found in the Catsambis (2001) study. For example, when parental expectations have no clear link to resource provision, as in the Goldenburg et al. study, there may be no evidence of improved student achievement. However, when parental expectations are connected with specific actions taken to provide for enhanced learning opportunities, as in the Catsambis study, it seems the expectations do make a positive difference. The combining of parental expectations and parental resourcing of students' learning was evident both in this study and the Catsambis study. This study supports the findings of Catsambis that parental expectations do make a difference to student achievement when they are connected to specific actions to support learning.

### **Nurturing nature of whānau**

The link between a nurturing home environment and enhanced student achievement has been recognised in the literature (Codjoe, 2007; Csikszentmihalyi et al., 1993; Freeman, 2000; Joshi & Acharya, 2013; Keen, 2004; Macfarlane et al., 2014). A study that illustrates this link was made by Csikszentmihalyi et al., (1993) over a five-year period. The research sample was 200 talented teens in two American high schools. Csikszentmihalyi et al. highlighted the powerful role family plays in the development of talent in adolescents. They argued that complex families were those most likely to stimulate talent development in teens and are those where both integration and differentiation are apparent. Integration is evident when the family environment is consistent, supportive and stable and there are close bonds between family members. Differentiation is evident when family members are encouraged to pursue new challenges that develop their individuality. Csikszentmihalyi et al., (1993) stated:

A complex family context will help young persons enjoy serious activities, such as studying, that normally are avoided whenever possible because they require too much mental effort. To enjoy a highly challenging activity requires a correspondingly high amount of psychic energy if the difficulties are to be mastered. A family that provides a teenager with a sense of support and consistency, and encourages her or his intensity and self-direction, enhances attentional capacities for finding challenges and

for mastering them. Thus complex families create autotelic contexts that improve the quality of experience for their members. (pp. 173-174)

Aspects of this complexity were alluded to by the students and their parents in this study. Several students and parents commented that the consistent, stable and supportive nature of the family, and the close bonds between family members, were elements contributing to academic success. Similarly comments were made that an important reason for choosing a particular secondary school was the greater level of challenge that would be experienced by comparison with other schools in the area. In order to receive more demanding work some had left a very comfortable small primary school environment to come to a much larger secondary school where they knew only one or two other students. However, all the students I interviewed had risen to the challenge and excelled in the academic field. It should be noted however that Csikszentmihalyi et al. (1993) did not simply focus on two broad ethnicities and thus their generalisations need to be viewed with some caution.

A further significant feature was the unconditional love of parents towards their children that enabled them to take risks in order to develop their talents (Keen, 2004). The parents seemed prepared to make considerable sacrifices to enable their children to achieve. Several spoke of the involvement they had had at their sons' schools, particularly when attending primary school. Some also were self-sacrificing in order to provide the resourcing their sons needed in order to achieve well at school. Although several of the Māori and Pasifika boys I interviewed appear to have come from low socio-economic home situations, they still became one-band students at their secondary schools. As stated earlier, the parents in these families set out to compensate for any disadvantage the boys may have experienced through not having access to resources such as the Internet at home. Because parents valued education highly, expected their sons to achieve, and had a nurturing approach to parenting, they seemed to find ways to assist their sons in accessing the resources they needed to achieve comparably with their more advantaged peers of like ability.

An important aspect of a nurturing environment already alluded to in this study, was the role modelling of valuing education mentioned by several Pasifika boys. However, role modelling goes well beyond valuing education and also incorporates emotional connectedness. One of the facets of Pollack's (1999) research points to connections between fathers and their sons. The research, through the Harvard Medical School, was undertaken over two decades and involved interviewing boys and their parents in the Listening to Boys' Voices project. He states that there is a prevalent myth that the heroes boys admire are celebrities such as movie stars, astronauts and sports stars. However, his research indicated that their real heroes were most likely to come either from the immediate or extended family. Similarly, Lashlie (2005) asked boys about role models and what types they aspired to be like. The boys plainly differentiated between role models such as people in the public eye for their wealth, glamour, status or sporting ability and those who were their real role models. The real role models were people they actually knew such as grandfathers, uncles, older brothers, teachers and coaches but seldom their fathers. In Lashlie's view, it is very important that we look for good role models amongst the men in boys' lives. Above all other role models, she considers fathers are those who most need to be seen in that light. Pollack (1999) stated, "When fathers invest early in nurturing their sons and keep at it throughout adolescence and adulthood not only will their boys be better off emotionally and intellectually, but they as fathers, will feel enhanced self-esteem..." (p. 135).

While Pollack recognised the positive impact of nurturing fathers on the emotional and intellectual development of their sons, he acknowledged that many of the boys he interviewed longed for a closer connection with their fathers. These were not necessarily boys from families that may appear to be 'dysfunctional'. Some of these boys apparently had decent and caring fathers, but these fathers simply did not know how to meet their sons' needs for affection, attention and love. It was reported that many of these boys felt a sense of betrayal, anger or numbness because their fathers had not invested the time in them that they desired (Pollack, 2000).

However, there is evidence that North American fathers are, “in the midst of .... a shift, away from the authoritarian, emotionally detached father and toward the involved, nurturing father” (Morman & Floyd, 2002, p. 395). As Morman and Floyd note, there is evidence that mothers are working increased hours and earning a higher percentage of the household income than in previous times which has resulted in a greater sharing of household chores and child care. It seems an increasing number of fathers value involvement with the family over early career advancement. Several boys in my study seemed to have fathers who were of the involved, nurturing type described by Morman and Floyd.

While mothers were not specifically described as role models by the boys that were interviewed, some may indeed have filled that role. In a few cases the part mothers played received explicit comment. Certainly, all the mothers that were interviewed had played a significant part in supporting their sons, and appeared to provide a nurturing environment for them. There may have been many other cases where the mother’s role was important as well. This would be an interesting area for further research.

All the parents of Māori students I interviewed spoke of the role that whānau played in fostering student achievement. Jenkins (2002) acknowledges that from a Māori perspective the whānau has a significant role in developing and nurturing individual student gifts, but the attribution of the gifts is made to the whānau rather than the individual alone. When individuals possess gifts or talents that have come to the attention of others, and been recognised by them, they are deemed to have a responsibility for acknowledging their whakapapa from whom the gifts have been derived. In my research, Anaru in particular, with his references to the educational legacy provided through his father’s koro, acknowledged his whakapapa from whom his academic gifts and talents had been derived. Twenty-two out of the 30 students I interviewed acknowledged the importance of whānau in the development of their gifts and talents.

Bishop et al. (2007) found that whānau of Māori students in their study acknowledged that they take some responsibility for making sure their children achieved at school and that in nurturing the relationships with their children they

will be contributing to their success at school. However, there was a strong expectation that schools and teachers would take responsibility for the quality of their children's learning experiences. The whānau is a key source where Māori values are taught and assimilated as part of each child's development. Macfarlane (2010b) commented:

For Māori, development is deeply underpinned by values of wairua (spirituality), manaaki (care for others) and whānaungatanga (maintaining the family). These values are kept alive in rituals and stories, but they are also lived in everyday contexts, such as greetings and partings, blessing food before eating together, caring for one another's children, even sharing clothing, cars and other possessions. (p. 13)

The values taught in the home form part of the individual's identity. Taking these notions into account, it would seem logical to suggest that when schools and teachers are ignorant of the values taught in the homes of Māori and Pasifika students, the building of a positive home-school partnership is hindered with possible negative consequences for student achievement. Bishop et al. (2007) stated that the whānau of Māori students believed schools and teachers needed to develop improved understanding of things Māori, and to recognise Māori cultural values, ways of knowing and aspirations. The mother of one Māori boy in this study commented that, while her own son had always been treated fairly by the school, from her observation teachers did not always take into account the home backgrounds of students which she considered was unfair to the students concerned.

Although not specifically discussed by Māori parents in this study, one of the key Māori values is wairua<sup>54</sup>, a value which is also of significance to Pasifika. In the findings, I reported the important place that the church and the spiritual dimension had in the lives of some students, particularly those who were Pasifika. It seems that the place of the church and/or the spiritual dimension was important in the lives of some parents and encouraged in their children. It is acknowledged that attending church, because it is a family and cultural expectation and/or because it

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<sup>54</sup> Spirituality

is a place of social interaction, differs from valuing and being guided by the spiritual dimension of one's life. The five students who mentioned their church involvement and/or the spiritual dimension did so in response to an open-ended question about what factors had contributed to their achievement. This indicates the influence of the church/spirituality in their lives as it was an unsolicited topic. Four of these students specifically discussed ways their church involvement had impacted on their beliefs or sense of wellbeing and behaviour. Faaea-Semeatu (2011) reported on the significance of church affiliation. She elaborated:

Students, who are raised predominantly in a Christian religious environment, whether it is in a church which speaks their mother tongue, or an English-based faith, extol the virtues of using their knowledge and experience gained as an individual to benefit others. It is important for gifted and talented Pasifika students to be able to use their skills and experiences in church to be able to transfer to their school context, for example, public speaking, showing signs of respect, behaving in accordance to social norms and questioning or clarification. (p. 118)

While the church is clearly an important setting in which the spiritual dimension of Pasifika students is nurtured, the nurturing of the spiritual dimension is also a characteristic of other cultural groups. For example, Māori, Australian aboriginal and Navajo value the spiritual dimension quite distinct from any specific religious institution (Bevan-Brown, 2011b). Macfarlane et al. (2014) affirm the importance of the spiritual dimension to Māori, viewing it as an aspect of wellbeing and values. The importance of the spiritual dimension and the notion of spiritual giftedness appear to have been embedded in Māori, Australian aboriginal and Navajo cultures, throughout much of their history. For example, Begay and Maker (2007), in commenting on the Navajo (or Dine') notion of giftedness stated:

People are each endowed [by the Holy People, the deities] from prebirth with a gift, and at birth it is the responsibility of the parents, grandparents, extended family and kinfolk to identify this unique gift, ability and talent...The Dine' epistemic conceptualisation, identification, and cultivation of giftedness are deeply embedded in the spiritual world. (p. 160)

The above findings indicate that several boys and their parents considered the religious beliefs and family values positively influenced achievement. In Schools A and B there was some evidence the spiritual dimension was integrated into cultural performance as well as the learning of te reo Māori and the Samoan language. For example, the Māori and Pasifika tutor groups<sup>55</sup> had karakia as well as waiata<sup>56</sup> where spiritual messages were sung. The karakia and waiata at school made a connection with some students' home and church lives.

For Sharples (2006) and Faea-Semeatu (2011), the church and/or spiritual dimension are integral to the lives of many Māori and Pasifika students. It would be interesting, in the light of this, to research whether gifted and talented Māori and Pasifika students achieve more highly when they consider their teachers value and respect the spiritual dimension of their lives. Without the benefits of such an investigation it would nevertheless, seem to be important that schools support families in the nurturing of the spiritual dimension.

### **Natural endowment**

A further way the whānau contributed to student achievement was through natural endowment. Simonton's (2008) definition for natural endowment states:

Natural endowment, whether intellectual or personality, may be either genetic or nongenetic. The genetic traits involve the direct transmission of genes from parents to offspring...Nongenetic endowment is any intellectual or personality trait present at birth that can be ascribed to some other developmental process. For instance, inborn characteristics that result from the intrauterine environment during pregnancy would be considered of this nature. (p. 32)

Seven of the students I interviewed commented that an important aspect in their academic success was that they were born gifted and talented. They had the natural endowment required to enable them to achieve. However, only in two

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<sup>55</sup> Groups of students with all year levels represented. Each group has a teacher attached to it who has responsibility for the pastoral care of the group. Often students will have the same teacher responsible for them throughout their time at secondary school. A tutor group is also termed a 'form class' in some schools.

<sup>56</sup> Songs

cases were there no environmental elements or intrapersonal qualities identified as contributing to their achievement. The other five boys all viewed their natural endowment as working in tandem with environmental components. Gagné (2008, 2010) identified natural endowment as a chance factor. Many Māori and Pasifika people would consider it debateable that any such endowment would be by chance, and be more likely to view chance as divine activity. Given the importance of whakapapa in their cultures, chance may also more accurately be defined as cultural lineage. A whakatauki<sup>57</sup> illustrates this: “Ehara taku toa, he takitahi, he toa takitini” (My success should not be bestowed onto me alone, as it was not individual success but success of a collective). The collective includes ancestors.

Whether one views natural endowment and upbringing as being derived from divine activity or related to chance it appears combined with environmental catalysts these factors provide a foundation for the nature and nurture of each individual. There is much debate about the extent to which nature and nurture determine academic success. It would seem that giftedness becomes evident in a student as the result of the complex interplay of natural endowment and environmental elements. Clark (2008) commented:

Genes cannot be thought of as causing particular attributes, rather they have a wide range of effects in different environments. Genes do not make the specific bits and pieces of a body; they code for a range of forms under an array of environmental conditions. Moreover, even when a trait has been built and set, environmental intervention may still modify what has been inherited...It is misleading to think of either genes or the environment as being more important. Genes can express themselves only in an environment, and an environment has no effect except by evoking genotypes already present. (p. 49)

Simonton (2007) cites empirical evidence showing leadership ability and creativity arising from both genetic endowment and environmental factors. Moreover, Simonton (1999) considers that innate abilities may to some extent explain exceptional performance in the arts, science, sports and games even

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<sup>57</sup> Proverb

though environmental factors are more widely recognised. Plomin (2004) argues that as much as half of the variance in measures of school achievement, attitudes, interests and self-esteem between individuals can be accounted for from genetic influence. Furthermore, he posits, “Psychological environments can be considered as extended phenotypes of the individuals, reflecting genetic differences as they select, modify, and construct their environments” (p. 346). However, good genes alone will not enable talent to emerge.

In terms of environmental influence, the sociocultural setting of students’ homes as shown in this study affected their capacity to achieve highly as well as shaping their identity. The valuing of education, high expectations related to achievement and the nurturing nature of many students’ homes contributed to the identification and support of their talents. Their upbringing appeared to contribute significantly to their personal identity as successful academic students. In addition to the sociocultural influences on student achievement, it seems their natural endowment also played a part in their academic success.

### **Summary**

The findings of this study suggest that family influences are the pre-eminent aspects contributing to the identification and development of gifted and talented Māori and Pasifika secondary school boys’ talent, and their resultant high achievement in the school context. From the accounts of the students and their parents there appear to be four major reasons why family influences have impacted in a major way on student achievement – the value placed on education, parental expectations, the nurturing nature of students’ homes and natural endowment.

Several students, as well as parents, spoke in some detail about how education was valued in the home. The expectations of achievement were specific in nature, not simply a generalised notion that students should achieve. It seemed that in most of the students’ homes their parents (and sometimes other whānau) cared for them in such a way that they provided strong foundations for educational success. Evidently, if there was an education or learning need that parents could not

personally resource, they would find another way to meet that need. This nurture also included time and effort put into supporting educational endeavours as well as, in several cases at least, providing for the development of the spiritual dimension of their lives. A noteworthy feature of several homes was the caring role taken by fathers, this being particularly evident with several Pasifika students. In addition, natural endowment was an element linked to the success of some students.

## **Chapter Six: Intrapersonal Characteristics**

This chapter reports the findings of this study related to intrapersonal characteristics, and their influence on the development of the boys' talent as shown through academic success. Students and their parents and/or whānau identified a wide range of intrapersonal qualities they considered had contributed to the boys' academic success in the school setting. The intrapersonal characteristics often mentioned by students and whānau are discussed beginning with the most frequently identified as an element contributing to student success. Intrapersonal qualities appear to influence student achievement as well as the development of their personal identity. The intrapersonal traits have been placed into four categories, the purpose of which is to link together accounts of intrapersonal characteristics with similar themes. In reality the intrapersonal qualities overlap, are inextricably linked and are influenced by wider sociocultural contexts.

### **Results**

#### **Strong work ethic**

The intrapersonal trait most often mentioned (by more than 25 per cent of interviewees) was a strong work ethic. This trait concerns the time and effort students expended in their studies. This strong work ethic was sometimes motivated, it seems, by a desire for advancement. For example, four of the students (Tauaarangi, Rawiri, Hone Urenui and Wiremu) commented about the importance of a strong work ethic in their achievement and spoke of the desire for promotion to a higher band or class. This seemed to motivate them to work hard.

Tauaarangi attributed both the achievement of his academic goal of promotion to a higher class and his selection as a school prefect to his hard work. He began his secondary schooling in a two-band class, said he found the work too easy, set himself the goal of moving up a class and stated he worked hard for promotion. Tauaarangi first moved to the second top class in Year 10 and then to the top class in Year 12 where he remained in Year 13. At the time of interviewing him for this research, Tauaarangi's teachers explained he was doing well in Year 13 and

appeared to be on target to be the first one from his family to graduate from high school with a Level 3 NCEA qualification. Tauaarangi also alluded to his school work as an escape when dealing with personal and family trauma.

Advancement also seemed to be a driving force in Rawiri's case. He commented that when he was placed in a two-band class at the outset of his secondary schooling he was initially content with the placement. However, his observations of the school and comments from his peers led him to believe that one-band students received better opportunities, and had better teachers in general than those in two-band classes. Rawiri's desire for promotion from his two-band class in Year 9 to a one-band class in Year 10 was realised, he explained, through hard work:

I think it was just the way I worked throughout the year and at the end of the year, in all the tests, I think I did really well. I got first in social studies and science and second in English and maths in the final examinations. I thought I did well and I wanted to get those marks because I studied quite hard and I put in the hours. I thought that I should get what I thought I deserved for all that work that I did.

Illustrative of Rawiri's hard work was his account of the comprehensive folder of study notes he compiled and the active study techniques he used to prepare for examinations. He stated:

I'll just go in my room and go over my notes and write review pages or go over a certain topic or write mind maps or just read a book on what I need to write and make notes on that. I then write a review page and then go over those review pages. I've got a big folder of all my study notes that I have kept and now I add to it.

In a similar vein, Hone Urenui began his secondary schooling placed in a lower class than he expected. He was placed in the second-ranked two-band class but seemed motivated to work hard by the desire for promotion to the one-band class. Hone Urenui considered his placement in the two-band class had resulted from "problems with tests and a failure to study". He stated, "When I was placed in a lower-stream class people saw that I was just a Māori person, a stereotypical

Māori I guess”. When in this class Hone Urenui said, “I got a bit of a hard time because of who I was. It had nothing to do with my race. I was a so-called nerd. I thought it was too easy, I guess and people were annoyed that I kept finishing first”. He remarked how this placement had been a ‘wake-up call’ for him. The message he got from the wake-up call was that he needed to, “start pulling my weight and studying, working hard, striving for excellence”. Half way through Year 9 Hone Urenui was moved to the top two-band class where, he stated “I’m not going to settle for this. I can do better”. At the start of Year 10 Hone Urenui was moved to a one-band class where he considered, “It made them work harder and it made me work harder as well”.

Another student whose strong work ethic appeared to be motivated by the desire for class promotion was Wiremu, who reported how he had learned the importance of hard work in Year 9. He recalled his disappointment at only making the fourth ranked class in the one-band in Year 9 when he had hoped to be higher. He considered he had been identified as a student who “had brains but wasn’t willing to work as much”. His Year 9 English teacher remarked that there was a gap between the quality of contributions to class discussions and the quality of what was written on paper and that during the course of the year, due to his focus on his work, that gap closed substantially. By the following year he was promoted to the second-ranked, one-band class for the start of Year 10.

Vamana’s work ethic appeared to be motivated by a somewhat different goal. In his case, he seemed to be highly motivated by the desire to improve in English. He recalled his first day in a New Zealand school: “On the first day at school, one of the Palagi<sup>58</sup> boys came up to me and asked me for my name and stuff. So that’s my first time to talk in English. Oh, for the first hour I was like, ‘Oh this is too much for me, boy’”. Vamana’s response to the challenges of learning to communicate in a new language illustrates his strong work ethic. He recounted: “I started talking in English at home. I started to read some books in English. I tried hard to speak it properly”. Furthermore, from his account he followed up the lessons taught during the school day with further study at night. As alluded to in

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<sup>58</sup> European, Caucasian

Chapter Five, Vamana asked his father and older sister for help. He said, “I didn’t stop studying. When I get home, I keep studying, really. I’d go over my notes and stuff like that”.

In some cases whānau also spoke of the significance of a strong work ethic in student achievement. Werahiko’s mother and father linked his hard work in the classroom to the way he developed his skills in sport, from not being a natural athlete to being a champion sportsman in multiple fields. They described the commitment and hard work he put into developing his strength and honing his skills in sport. Werahiko seemed to bring the same attitude of hard work to his academic studies. His Year 9 English teacher stated that he regularly completed his homework on time and to a high standard. He also recalled that Werahiko’s in-depth study (a three-month homework exercise) was exceptionally well done and was amongst the top three in the class. It was chosen to be orally presented to parents at a special whānau evening. Furthermore, the teacher commented that it seemed Werahiko would always endeavour to act on any advice he was given about how to improve the quality of his writing. Werahiko’s father described his hard work as “doing his best” and said that numerous people have recognised and observed this quality of Werahiko’s. In an interview with the headmaster who had viewed his books, she noted the high quality of his work presentation, and the way he also consistently “does his best” on the sports field.

The remarks of students and parents made it evident that the recognition of the need to work hard and the application of a strong work ethic played a part in the success of many students. Linked to a strong work ethic, another characteristic cited by students as a reason for achieving success was that of determination.

### **Determination**

Several students identified determination as a key component of their academic success. Whereas hard work defines the time and effort devoted to school studies, determination describes the attitude that leads to effort and time given to working for high achievement.

A number of examples of determination were evident in the data. When asked the question about what factors had contributed to his achievement, Tauaarangi's first response was to mention his determination. He stated that he was determined to make himself, "better than I am". Vamana also spoke of his determination when he first began schooling in New Zealand. He said that although the class work was "too hard for me because it just came to me slowly" he also stated that he never wished to be placed in an easier class and that he was determined to succeed in the higher class.

While students only spoke briefly about their determination, some parents spoke in more detail about their sons' determination. Werahiko's parents spoke of their son's determination, which had been evident in the way he had approached his sporting commitments. He had been committed to his early morning sports training through the winter and in spite of, at one stage, being in recovery mode from a fracture, he continued to train. This same determination had been evident in the way he approached achieving academic success. Werahiko's parents stated that they had sought to instil the quality of determination in him. For instance, they reported they repeatedly gave him the message that they expected him to give 100 per cent in all he did. This attitude towards his studies seemed evident to Werahiko's Year 9 English teacher who recalled that Werahiko had some difficulties coming to terms with the one-band English programme. In particular, he needed to learn to structure his writing more effectively and to develop in-depth responses to texts. To do this he sought help to improve and seemed to diligently apply what he had been taught. He ended the year achieving in the top half of the class and was promoted to a higher English class the following year.

Related to the quality of determination is the trait of self-motivation which for some students was partly demonstrated through goal setting. Rawiri's father and mother both identified self-motivation as a significant factor in his success. His father expressed puzzlement about how his self-motivated characteristic had developed:

It surprises me how self-motivated he is, to be honest, because, comparing him to his older brother, it's just completely chalk and cheese. It just must be something inside him that's just clicked and I don't know whether it's

come from his environment or whether it's just a gene in there that's just turned on. I can't really think, because they were all brought up in exactly the same household with the same parents and same environment and it's just amazing how different they can be.

Factors such as birth order were viewed by Rawiri's mother as contributing to his self-motivation. She argued that as the youngest of three siblings he was motivated to achieve more highly than his older siblings. A recollection of Rawiri's Year 9 Social Studies teacher added further evidence of Rawiri's determined character. He recalled being,

really impressed that he had set himself a goal of getting over 80 per cent as an average in his end of year exams. He came to me and asked if he did a practice essay would I mark it and give him feedback on it before the exam. It's pretty rare for someone to do it, even in a top-band class, but for someone in a middle-band class to do that, I was really impressed with the motivation to succeed.

Petera's father also commented on his son's self-motivation: "If he sets his mind to something, saying, 'I want to do that,' he'll do it, he'll try it, as hard as he can do it". Furthermore, Petera's uncle indicated that setting goals and working to achieve them was an important part of his achieving academic success. All three of his caregivers spoke of him having a long term goal to join the police and how that goal had not changed since he was young. His father stated that the decisions he made about subject choices were influenced by that goal. He had also set the goal of becoming a prefect, wanting to follow in his older brother's footsteps, a goal he achieved in Year 13.

Like Petera, Tauaarangi also set himself the goal of becoming a prefect in Year 13 and expressed satisfaction that he had achieved this goal. In addition, Tauaarangi aimed to be the first person in his family of his generation to graduate from high school. Vamana was another who appeared self-motivated by the setting of goals. Vamana spoke of how, as a little boy, growing up in his Pacific Island homeland he asked his father how he could become a doctor. His father told him he would need to go to school and study hard. From his account, that boyhood dream has

never left Vamana and the goal of one day being a doctor has been a driving force in keeping him motivated to achieve academic success.

An interesting finding was that two of the Pasifika students, Mareko and Isaako had goals that were not simply related to their own personal success. They seemed to be driven by a desire to be role models by confronting and defying low expectations and low achievement. Mareko stated that he was seeking to break the stereotype of Pasifika students not being academic in order to demonstrate to other Pasifika students that they can succeed academically. He commented:

Pacific Island and Māori students aren't really well known for academics. They are not really high in statistics. I wanted to prove that Pacific Island students could actually be in top band. Islanders are just sporting. They just do enough. They take the easy way out. Ever since I was a kid I've always wanted to try and be the best at something or try at least to succeed in something. I just wanted to show that Pacific Island students can actually succeed in life.

Isaako reported that he set himself the goal of being the first member of his family to go to university. However, from his account this goal was not simply about him gaining personal recognition or approbation. He stated that he wanted to pave the way for his younger siblings to follow him, and to be an example for other Pasifika students.

Mareko also seemed to have a very clear, self-focused career goal that was a driver of his academic success. He explained that his ultimate goal was to be admitted to the bar as a court lawyer. In working towards this goal he needed to make a very significant sacrifice. He was, it seemed, on track to follow his older brother (with whom he used to train) onto the national and international sporting stage in his high-profile, chosen sport. However, Mareko reported that at the start of Year 12 he decided to forego sporting success. This was in order to utilise for academic study the long hours formerly devoted to sport, so he could prepare for his planned career. He found he excelled in Legal Studies and in Year 13 undertook two law papers at university, gaining an A pass in both of them. In reflecting on his decision to pursue the academic side of his life rather than

sporting success, Mareko remarked, “I love sports. It’s just that with the academic side there are more options in later life. What would happen if I focused on sports and got injured? I need something to fall back on so I just decided to go down the academic side”. I asked Mareko how he felt when his former team mates won a world title and he could have been part of the team but was not. He laughed and mused, “Yeah, I could have been part of it, you know, but it’s a choice I made. Sacrifices have to be made and I believe, in the end, if I do really well, the choice I made was a good one”.

While Mareko’s self-motivation was clearly linked to goal setting, it seems that the setting and pursuit of his career goal began with a passion he had developed for law. The extent of this is illustrated by the fact that it became a more dominant influence in his life than the sports he said he loved. Anaru was another whose passion in a particular domain appeared to be particularly self-motivating. He acknowledged that his strong enthusiasm and flair for information and communication technologies (ICT) was the primary motivation for his future career goal as a software developer. Furthermore, by Year 10 he had begun a business in web design.

### **Perseverance**

Overlapping both a strong work ethic and determination is the trait of perseverance. Perseverance is defined as sustaining one’s efforts in spite of difficulties or discouragement. Three students specifically spoke of their perseverance as a quality contributing to their academic success. In addition to the three students who spoke specifically about their perseverance, this attribute was implicit in several students’ and parents’ comments. Tauaarangi and Vamana, for example, specifically made comments about the way they displayed the quality of perseverance. Their accounts of their secondary schooling experience revealed that this was an important intrapersonal quality contributing to their academic success.

Tauaarangi shared significant personal and family traumas through which he needed to negotiate his way, as well as persevering with his academic goals. He

remarked in connection with these traumas, “I knew that no-one had such a difficult time like I did getting here because emotionally I’ve been a wreck for a good four years. I’m only just getting myself back together”. Of his last year at intermediate school and the first two years of high school he commented, “We had a series of unfortunate events involving my family so I was barely at school”. By his account this led to him underperforming in the entrance tests and being placed in a two-band class. He worked through the difficult times committing himself to work for class promotion to a one-band class. Not only had his family circumstances been difficult, but he also reported rejection from some of his peers. Some classmates disliked his superior achievement in a two-band class so they resorted to name calling. When he moved to a higher class he stated he did not find acceptance there either as some students resented the challenge he provided to their academic status in the class. He also reported rejection by some fellow Māori students because of his “lightly coloured skin” and was described as a ‘plastic Māori’. In spite of these challenges, with the support of whānau and a small group of friends and teachers, Tauaarangi was focused on becoming a top student, and from his own account and that of one of his teachers, he persevered to achieve his goals.

Perseverance is also evident in Vamana’s story. As an immigrant he had to adjust to communication in English instead of his native Pasifika language. From his account, initially he failed several assessments. However, his perseverance was shown in the way he dealt with these failures. Vamana elaborated, “If I fail this test, on the next one I’m not going to fail again. I’m going to keep studying and studying until I pass”. It could be considered that Vamana, as a new learner of English, did well to gain around 150 credits at Level 1 of NCEA in only his second year in a New Zealand school. Nonetheless, he was not satisfied with this result and persevered to acquire the knowledge and skills in an attempt to increase the number of Merit and Excellence credits he achieved at Level 2.

### **Identity**

In this study, identity refers to the perceptions students have about themselves as well as the perceptions they believe others have about them. The following

outlines the significance of identity as commented on by participants. One example, Anaru was a student of Māori and Pasifika descent, and as an outstanding academic student, had spent most of his schooling in top-streamed classes where he was the only Māori/Pasifika student. On the one hand he commented that he enjoyed the challenge of these classes and found them preferable to what he had heard occurred in other classes with their slower pace and repetitive drill. Anaru stated he was comfortable in relating to the other students who were of Pākehā, European and Asian ethnicity. On the other hand he also stated he embraced his Māori and Pasifika cultural heritage. For example, he competed in kapa haka at national level. In addition, Anaru actively sought to develop his connections with the school Pasifika community by requesting to be placed in the Pasifika tutor group when he was a senior student. He reported that this request was made in order to engage more with his Pasifika culture, and to be an academic mentor to younger Pasifika students. At a Māori and Pasifika awards evening, where Anaru was awarded top Māori and/or Pasifika scholar in the school, he participated in both the school kapa haka and Pasifika song and dance performances. It seemed that Anaru had a strong racial-ethnic identity as Māori and Pasifika and as an academic student.

Another student with strong academic ability who had developed a clear sense of identity was Henare, a student of Māori ancestry. From his account, his academic abilities had been recognised in primary school where he stated, “I excelled”. He also commented “they found it quite hard to cater for my needs” and as a result promoted him so that he finished his primary schooling a year earlier than normal. He was also placed in the top academic class from the start of secondary school and graduated as the school’s top Māori and/or Pasifika scholar. Before commencing secondary school Henare had been involved with kapa haka for about four years. In response to a question about whether he had encountered any bullying at high school, he responded, “Kind of. It’s just playful bullying I think”. He then elaborated stating that in Year 9 he chose to study te reo Māori but commented, “For me personally, not looking Māori, in the Year 9 Māori class it was quite difficult, but I just persevered and showed them...I just ignored it, laughed along with them”. It seems that Henare’s awareness of his fair physical appearance, and the possibility of teasing arising from it, led to his decision not to

continue with kapa haka in Year 9. When I asked him why he did not join kapa haka in Year 9 he remarked, “It was just kind of that scariness, yeah, I was afraid of being bullied”. Henare did join the kapa haka group in Year 10 however and remained part of the group throughout the remainder of his secondary schooling, representing the school in the national kapa haka competitions. While his physical appearance may have suggested Henare would identify as Pākehā, he referred to himself as Māori. By the time I interviewed him in Year 13 he seemed to have developed a clear sense of racial-ethnic identity as Māori, and informal observation of him revealed he appeared to have strong interpersonal skills that enabled him to ‘straddle’ the Māori and Pākehā worlds successfully. He remarked, “I kind of have a foot in both camps”.

Petera was another student who apparently demonstrated the ability to straddle the Māori and Pākehā worlds successfully, achieving as an academic student and identifying with his cultural roots. For five years prior to enrolling in his mainstream secondary school he attended a kura kaupapa Māori. Apparently Petera’s secondary school teachers were concerned about how he would adapt to the much more structured environment of a traditional boys’ secondary school. However, his father reported that there was no difficulty in adapting and that by the time he enrolled at secondary school he already had a firmly developed racial-ethnic identity as Māori. He viewed both the kura kaupapa Māori and mainstream secondary schooling as beneficial commenting that they had given him, “the best of both worlds with the Māori and the Pākehā”.

Several other students also spoke of both the importance of academic success, and involvement in the performance aspects of their culture through the school. It seems both helped shape their personal identities. However Mikaere, who had been involved in kapa haka as a Year 9 and Year 10 student, ceased participating in the senior school. He claimed the reason was, “I’ve got too much school stuff. I can’t really do that as well as do kapa haka every weekend...I fell behind last year because of it”. When asked what the time commitment had been, Mikaere replied, “Most weekends and most days after school going hard out”. There may have been some regret that he felt he could no longer afford to participate because he said, “It was a real, sort of good environment with everyone there because

everyone knows each other and it was like a family, kind of". At this stage of his life the expression of his racial-ethnic identity through kapa haka seemed to become less of a priority than his academic identity.

In addition to racial-ethnic identity and academic identity, altruism may be viewed as part of an individual's identity. While no students spoke specifically of altruism being part of their identity it may be considered evident in those who displayed a service orientation. In the course of interviews, three students spoke of the service they had freely given to the school. For example, as already discussed, Anaru joined the Pasifika tutor group to take on a mentoring role to younger Pasifika boys. It was no surprise that Anaru became a prefect in Year 13 and was a member of the prefects' service committee. He reported that after he had graduated from high school he returned several times to assist the new service committee in learning their new responsibilities.

Taniera was another student who exemplified a care for others that was demonstrated ultimately in service. His English teacher in Year 9 reported he wrote a remarkably empathic piece of creative writing about two boys who were teased at school because of a disability. When Taniera was first interviewed in Year 10 he expressed concern about some Pasifika boys being viewed by their peers as intimidating bullies and indicated this was an image he would like to change. As he progressed through school, Taniera took on a mentoring role to younger boys in the Pasifika tutor group. When he was interviewed for a second time in Year 12 he had been elected as a SAFE (Students Against all Forms of Exploitation) leader. In this role he reported he was involved in patrolling the school grounds to assist other students to sort out interpersonal conflicts. Taniera's skills as a leader and his service values were recognised when he was chosen as Head Boy in Year 13, the first Pasifika student in the history of the school to hold this position.

A further example of a service orientation was Henare who also reported being elected as a SAFE leader in Year 12 and a prefect in Year 13. In addition he was specifically requested by the GATE director to take on the role of mentoring a

gifted Year 9 Māori boy who was struggling to adapt from a kura kaupapa Māori primary school to the mainstream secondary school environment.

A strong sense of self-belief also seemed evident amongst the boys and this characteristic was specifically identified by two of them. Tauaarangi asserted his initial placement in a two-band class in Year 9 was not a true indication of his ability, citing other factors such as personal trauma that had impinged on his performance in the entrance tests. He linked his hard work and determination to self-belief stating: “Another reason why I pushed myself was because I knew I could do better than some of the levels down in the middle band”. Vamana also appeared to have a strong sense of self-belief. In response to the question, “What do you attribute your success to”? he replied, “I think I have success because I believe in myself”.

Students primarily discussed their identity in terms of their racial-ethnic heritage and academic success, although three students spoke of their service orientation, while two students also alluded to their self-confidence and self-belief. However, there is more to identity than these aspects of their lives. Their strong work ethic, with determination and perseverance are also distinguishable as aspects of identity, because they are perceptions held about themselves and that others hold about them.

## **Discussion**

It seems that while family influences (discussed in the previous chapter) were the most dominant components mentioned by the boys as contributing to high achievement, there is a realisation that individual intrapersonal characteristics also impact on the degree to which students succeed. In fact, a few boys failed to mention family influences as contributing to their achievement, instead identifying intrapersonal qualities linked to their achievement. Gagné (2003, 2008, 2010) considers that intrapersonal catalysts contribute to the development of natural abilities or gifts turning them into competencies or talents. He identifies three intrapersonal catalysts related to goal-management: volition, motivation and awareness. The four key intrapersonal traits identified in this study by students

and parents relate to Gagné's goal-management catalysts. It seems volition was evident in those who displayed a strong work ethic, determination and perseverance. Motivation also seemed apparent in those who were determined, and awareness featured in those with a strong sense of personal identity.

The interview sample of boys was predominantly made up of individuals who, from their accounts and those of their parents, displayed the intrapersonal qualities generally associated with volition and motivation. However, this was by no means the case with all of them. At least three, from their accounts, did as little work as possible and relied on their innate ability and strategic use of time to get them through assessments. This does not necessarily mean that they did not possess the traits connected with volition and motivation. It may be that the subjects they were studying at school did not provide sufficient challenge for the intrapersonal catalysts associated with volition and motivation to be needed. In other situations these may in fact have been evident. Arguably, being strategic could in fact be viewed as an intrapersonal characteristic related to self-awareness. Gagné (2010) identifies being aware of one's strengths and weaknesses as part of awareness. Such awareness enabled these students to be strategic in their time use.

Where intrapersonal qualities are mentioned as contributing to academic success it seems that these qualities work together to contribute to achievement. Csikszentmihalyi et al. (1993) reasoned that: "Talented teens have complementary qualities that in tandem are likely to produce a powerful autotelic combination" (p. 244). Some literature (e.g., Assouline, Colangelo, Ihrig & Forstadt, 2006; Gagné, 2010; Hogan, 2009) comments on the impact of the intrapersonal characteristics as contributing to academic success. Moreover, research with Pasifika families (Faaea-Semeatu, 2011) revealed the expectation that intrapersonal skills would be valued by schools as they were considered important to student achievement. However, not all research links intrapersonal qualities to academic achievement. For example, Hoggan's (2008) research with first year college students in their first semester found "intrapersonal catalysts added little to predicting first semester GPA" (p. 134). It would be interesting to know if the study had continued throughout the students' university experience if intrapersonal catalysts would have become an influence on their achievement. The

intrapersonal traits of a strong work ethic, determination, perseverance and identity are discussed in the remainder of this chapter.

### **Strong work ethic**

Eight of the students and five of the parents interviewed identified a strong work ethic as an intrapersonal characteristic associated with students' academic success. While a strong work ethic was seen to be an important part of these students' success, the question arises as to whether this quality is any more evident in gifted and talented students than in the general student populace of the same age. Do gifted and talented students in fact work any harder or do they simply work smarter?

As part of the research on talented teenagers undertaken by Csikszentmihalyi et al. (1993), 208 talented teens were compared with an average group of 41. Comparisons were drawn regarding how they utilised their time for the 16 waking hours per day or 112 waking hours available per week. An interesting distinction was drawn between how their time was used at school and at home. The talented teens spent 16.32% of their week on productive classwork in comparison to the 10.38% spent by the average group. Csikszentmihalyi et al. attributed the difference to the greater amount of time spent listening to the teacher, participating in class discussion, note taking and making project presentations, as well as taking additional courses related to their talents, and taking more advanced courses. It was readily apparent that the talented teens worked harder at school than their average peers. However, outside school the difference between the two groups was much less significant. The talented teenagers spent 12.19% of this time in study compared to 10.9% for the average teens. Given that talented teens were likely to take more courses, there was probably little difference in the time spent in studying on a per course basis. Csikszentmihalyi et al. suggest this was because the talented teens were likely to have been working more efficiently.

In contrast to investigating the actual hours devoted to focused school work, Assouline et al. (2006) conducted a study of 4901 gifted students from grades 3 to 11 investigating what attributes students considered contributed to academic

success. Interestingly, overall boys were less likely to choose “working hard” as a major reason for their academic success (38.5%) than were girls (54.9%). Furthermore, as the boys grew older they became less likely to attribute their success to “working hard”. In grades 3 to 6, 42% chose “working hard” as the primary attribute whereas in grades 9 to 11, 25% selected this as the main attribute. Boys were more likely than girls to choose “I am smart” (41.8% compared to 28.4% for girls) as the primary attribute contributing to their academic success. When boys failed they were more likely to attribute this to “not working hard enough” (68.9%) than were girls (62.2%). In spite of the differences in statistics for the genders and the different ages, it seems that a significant proportion of boys of all ages considered a strong work ethic was a major element contributing to their achievement. It seems that many of the boys, who did not attribute their success primarily to a strong work ethic nevertheless, when experiencing failure, recognised that hard work was important.

In this study, both a strong work ethic and genetic endowment are identified by students and their parents as elements in their academic success, sometimes with both elements cited by the same individual. While eight boys identified a strong work ethic as a component of their academic success, it was most likely to be recognised as a feature of their success by students who had begun their secondary schooling in a lower class than they expected, or one that did not match their ability. It seemed they realised sustained effort would be necessary to gain the advancement they desired. Having taught nine of the 30 boys I interviewed, I consider that eight worked significantly harder than their average peers of the same year level. Interestingly, only three of these mentioned a strong work ethic in connection with their success. Because the one-band classes of gifted and talented students in School A began studying in up to six NCEA Level 1 subjects a year earlier than the norm, there was a greater work load than for students in two-band classes. From the information obtained from the students themselves, their parents and teachers, it is evident that most of the 30 boys I interviewed had a strong work ethic. They appeared to work hard across all academic areas in school and some evidently were working hard in the sporting and/or cultural areas as well.

A strong work ethic has been identified in some studies as both an indicator of giftedness and a protective factor contributing to academic resilience. For instance, Bevan-Brown (2011a) and Macfarlane et al. (2014) outlined how a strong work ethic was prized by Māori as one of the outstanding personal qualities that are indicators of giftedness. Moreover, Renzulli (2002) identified task commitment as one of three traits of giftedness evident in student behaviours. He states that one of the manifestations of task commitment is, “hard work and determination in a particular area” (p. 70). Not only is a strong work ethic considered to be associated with giftedness, but it has also been found to be a protective factor contributing to academic resilience. Morales and Trotman (2004) define academic resilience as “the process and results that are part of the life story of an individual who has been academically successful, despite obstacles that prevent the majority of others with the same background from succeeding” (p. 8). A study by Morales (2010) of 50 “high-achieving, low socioeconomic students of color” (p. 164) sought to identify and explore significant protective factors that contributed to academic resilience. A strong work ethic was identified by 90% of these college students as a protective factor.

The importance of a strong work ethic to what is normally deemed to be success in life goes well beyond the years of a student. Freeman (2006) argues that hard work coupled with sufficient ability is one of “the primary building blocks” (p. 388) for success in the corporate world and in acquiring wealth as well as in education. The willingness to work hard was clearly an important characteristic in all of the 28 gifted New Zealand adults who were part of Moltzen’s (2005) study. For some, the willingness to work hard was domain specific. When a particular domain was an area of passion they worked hard within that domain, sustaining their hard work over time, although a strong work ethic was not characteristic of other parts of their lives. For others a strong work ethic was apparently transferable across domains, and was a feature that was part of every aspect of their lives. Moltzen cites one individual, VL2 as stating: “Even as a kid I didn’t mind work, helping my dad, doing my own garden. I was always keen to work. I didn’t mind any kind of work. I’ve always worked. I did lots of different kinds of work when I was a young man and when I worked, no matter what job I did, I put everything into it. I tried to do it well” (p. 174).

### **Determination**

Four of the students in this study identified determination as a personal quality that had contributed to their academic success. For example, Tauaarangi's account of his determination to achieve highly as an academic student in the midst of difficult and demanding situations both at school and at home, illustrates the impact that determination can have on an individual's achievement.

Zhao, when interviewed by Smydo (2010), commented, "With determination and practice a person can attain proficiency, if not greatness, in many fields" (para. 13). Determination was also identified by Bloom (1985) as one of the general qualities that was evident in all of the 120 diverse talented individuals he studied. Regardless of the field in which their talent was displayed, determination was an important quality that was apparent in its development. Bloom commented that there was a, "willingness to put in the great amounts of time and effort needed to reach very high levels of achievement in the talent field" (p. 544). He viewed this and other qualities as being strongly linked to the type of upbringing the talented individuals received as well as the significant interest the parents displayed in the development of the talent area. Furthermore, Csikszentmihalyi (1996) noted that individuals who became eminent for their creativity had, "the fierce determination to succeed, to make sense of the world, to use whatever means to unravel some of the mysteries of the universe" (p. 182).

While it seems determination may be one of the qualities that characterise eminent people it is also considered important for other gifted individuals. For instance, the participants in Bevan-Brown's (2011a) study valued determination as one of the outstanding personal qualities indicative of giftedness. Faaea-Semeatu (2011) posited that the Pasifika community expected students would be supported to demonstrate determination to raise their achievement. Teenagers from socio-economically disadvantaged backgrounds who were achieving highly in Ballam's (2013) study also frequently linked their drive (or determination) to their academic success.

The gifted young men in Hébert's (2000) study of student self-belief were also intensely determined. The poor and troubled urban high school they attended could be considered not conducive to high achievement. Nevertheless, student projects were reportedly followed through to completion at a high standard. These young men were aware of the sacrifices made by their parents and endured hardships with a determined spirit. Hébert asserted that, observing their friends struggle with alcoholism and home difficulties appeared to strengthen their determination to succeed.

In my study, the determination of several students was revealed, at least in part, through their self-motivation, often displayed via their setting and pursuit of personal goals. From the findings outlined previously, self-motivation was believed to have contributed to students' academic success. For example, Petera and Rawiri were students who, from their parents' reports, were self-motivated to the extent that it was apparent that this factor impacted positively on their achievement.

What participants in my study described as self-motivation is often described in the literature as intrinsic motivation (e.g., Clinkenbeard, 2012; Gottfried & Gottfried, 2004; Winner, 2000). Winner (1996) identifies a high degree of intrinsic motivation in a particular field of interest or ability as an indicator of giftedness. Winner (2000) describes this intense motivation as "a rage to master" (p. 163). Gottfried and Gottfried (2004) theorise that gifted motivation is not simply a facet of intellectual giftedness but is "its own form of giftedness" (p. 122). Furthermore they argue: "In the realm of motivation, we can also say that the term *gifted* would apply to those individuals who are superior in their strivings and determination pertaining to an endeavour. Hence motivation in the extreme would be considered gifted just as intelligence in the extreme is considered gifted" (p. 122). Whether intrinsic motivation is an indicator of giftedness or a domain of giftedness in its own right, it seems it is more clearly evident in the gifted than the general populace.

Studies by Gottfried and Gottfried (2004) indicated that academically and cognitively gifted students differed from other students in terms of their academic

intrinsic motivation from middle childhood through adolescence. They found that students with IQ scores above 130 scored significantly more highly on measures of academic intrinsic motivation than control groups. A further study by Gottfried, Gottfried, Cook and Morris (2005) showed, “academic intrinsic motivation was significant above and beyond IQ in predicting cumulative high school GPA” (p. 181). High self-motivation was also evident in the study of 14 and 15 year old gifted students undertaken by Phillips and Lindsay (2006). This was shown in the substantial amount of time devoted to extra-curricular activities such as debating, music and sports in which the students participated for enjoyment. Another indicator was the willingness to take intellectual risks and to seek help with difficulties or failure. Although examinations were an extrinsic motivating factor it seemed these students also enjoyed learning for its own sake. Interestingly, Grant (2013) found that even when they first started school, gifted children displayed high levels of intrinsic motivation.

An element of self-motivation that features in this study and in the literature is the setting and pursuit of academic goals. In McCoach and Siegle’s (2003) study of gifted underachievers and gifted achievers they concluded: “The goal valuation and motivation factors were highly correlated with each other, suggesting a strong relationship between a student’s goals and his or her motivation/self-regulation to achieve those goals. We suspect that goal valuation is a precursor to motivation and self-regulation” (p.151). In their view, when academic goals are valued by students they are motivated to achieve. In this study five students identified themselves as goal driven and a sixth, although he did not identify this as a personal characteristic, was identified by both his father and an uncle as goal driven. It seems for these students, goal setting had a positive impact on their learning.

Macfarlane et al.’s (2014) study also showed that many students considered goal setting was important and that the setting of both long and short term goals equipped students to become efficacious learners. Some from earlier generations also recognised this. Goertzel and Goertzel (1962) found that the parents of the gifted, eminent individuals that were the subjects for their research study were driving, striving people who clearly set personal goals. They were driven to

achieve and passed on their goal-driven characteristics to their children. A characteristic of those who stood out as leaders in Hébert's (2000) aforementioned study was that they were goal oriented. In Morales' (2010) study of similarly disadvantaged students, for 86% of the students, a focus on future goals was a protective factor contributing to academic success.

Significantly it seems that an important motivation for Mareko and Isaako was the goal to counter stereotyping of Pasifika students and to contribute to changing the deficit thinking associated with this. Bishop (2005b) comments that Māori in New Zealand have been pathologised through deficit thinking from 1840 onwards. Sleeter (2011) posits that in the American context "low teacher expectations of students of colour...were (and still are) common" (p.11). Noteworthy is that Mareko and Isaako recognised the deficit thinking related to Pasifika students and believed that they were able to play a part in countering it by being effective role models for others.

While the pursuit of goals seems to have been of benefit to individuals in the aforementioned studies, not all of the literature espouses the benefits of goal setting. For example, while goal setting has become popular in the business world, Ordóñez, Schweitzer, Galinsky and Bazerman (2014) argue that organisations should be cautious about goal setting because of inherent dangers in the process. These include neglect of important areas in which goals have not been set, inhibited learning and reduced intrinsic motivation. Reduced motivation has also been found in some instances with goal setting amongst students in the education sector. Grant and Dweck (2003) state that where goals are related to performance avoidance (that is, focused on avoiding failure) they are likely to predict lessened intrinsic motivation and reduced performance. However, where goals are related to performance approach (that is, focused on achieving success) they are likely to improve performance. Moeller, Theiler and Wu (2012) also recognise the negative impact of failure avoidance goals. Nevertheless, they argue that when goals are focused on mastery they foster, "a motivational pattern associated with a deeper level of engagement that secures and maintains achievement behavior. This deeper level of engagement promotes internalization of the connection between effort and achievement" (p. 154).

Achieving success may have been a motivator for some other students, but for Anaru and Mareko, it seems their strong goal orientation arose more from a passion for a particular field of study. For instance, Anaru's passion for ICT prepared him for outstanding achievement and the winning of university scholarships in the field as well as a career that started as a fourteen year old. Gladwell (2008) uses the example of Bill Gates to illustrate how a particularly strong interest provided intrinsic motivation to grow knowledge and expertise in the field of ICT which began as an eighth grader. Gladwell states, "From that moment forward Gates lived in the computer room" (pp. 51-52). This suggests determination and immersion are necessary if goals are to be realised.

While determination is clearly a volitional characteristic associated with academic success, it is a matter of debate why some people have this quality evident in their lives while others of apparently similar ability do not have the same motivation to achieve. It is debateable to what extent determination is an inherited quality and to what extent it is developed through the particular environment in which an individual grows up. Certainly Moltzen's (2005) and Ballam's (2013) research show that experience of adversity is linked to the drive to achieve and features in the lives of many of their research subjects. In Morales' (2010) and McGee's (2013) studies there were gifted students who overcame adverse socio-economic situations, extremely challenging school and community environments, and negative racial stereotyping in order to achieve highly. But why is it, that from within the same household one sibling will give up and underachieve as a result of adversity, while another will show great determination and achieve much more? Why, in Tauaarangi's whānau did he achieve highly when all other family members of his generation failed to graduate from high school?

The answers may be found in an analysis of their key attributes. Perhaps when a gifted individual has a clear sense of purpose in his life and has some experience of overcoming obstacles in order for his/her giftedness to develop, or to be recognised, only then will his/her determination become more evident. This was certainly the case in Ballam's (2013) research where six of the eight interview participants linked their drive to achieve to their desire to improve their personal

circumstances. In my research, determination was nowhere more evident than in the cases of Tauaarangi and Vamana. Tauaarangi, as previously mentioned, was determined to achieve highly in spite of the significant personal trauma he had encountered. He also had a clearly defined purpose to uphold the honour of the family by being the only one of his generation to graduate from secondary school. Vamana had a long-held desire to be a doctor, and as mentioned earlier, had to overcome the significant obstacle of acquiring a new spoken language when he migrated to New Zealand at the commencement of Year 10. Both Tauaarangi and Vamana appeared to believe their lives had purpose, and intensely desire to fulfil that purpose. That self-belief and desire may well be a reason they were so determined to achieve.

### **Perseverance**

Closely linked to the volitional quality of determination is the trait of perseverance. As already mentioned earlier in the findings, two students who stood out for their determination also demonstrated remarkable perseverance. Tauaarangi and Vamana were able to work consistently over time towards achieving their academic goals. In spite of having major obstacles that would have deterred many of their peers in the quest to achieve highly, they persisted until their goals were achieved, and at the time they were interviewed were continuing to work towards their current goals.

Of all the intrapersonal qualities identified as characteristic of academic, high achievers, the one that was most frequently identified in the literature (e.g., Duckworth, Peterson, Matthews & Kelly, 2007; Kaufmann & Matthews, 2012; King, 2014) was perseverance or persistence. Indeed in Cox's (1926) research as part of a longitudinal study of 301 individuals identified as geniuses, she stated, "high but not the highest intelligence, combined with the greatest degree of persistence, will achieve greater eminence than the highest degree of intelligence with somewhat less persistence" (p. 187). She generalised that: "Youths who achieve eminence are characterized not only by high intellectual traits, but also by persistence of motive and effort, confidence in their abilities, and great strength or force of character" (p. 218). Indeed, it could be argued that persistence is a

personal quality of individuals who show “great strength and force of character”. Cox commented further, “the appearance in childhood of a combination of the highest degree of general ability, special talent, seriousness of purpose, and indomitable persistence may well be greeted as indicating a capacity for adult achievement of the highest rank” (p. 219).

One example of the importance of perseverance to the achievement of children and adults is Kaufmann and Matthews’ (2012) study of Presidential Scholars 40 years after receiving their awards. It seems that a significant proportion (60%) of these scholars endured extreme conditions or traumatic events before they had reached 18 years of age yet became Presidential Scholars, and then beyond school, achieved highly in the academic field, as well as having fulfilling vocations. The most frequently identified early stressors were bullying or discrimination, frequent family marital discord, economic hardship, and death of a close family member. Furthermore, 59% of respondents reported academic, personal or social difficulties in their adult lives associated with their abilities or achievement. Nevertheless, 79% indicated that their work provided a great deal of enjoyment and a further 19% stated that work brought them some enjoyment. Postgraduate degrees were gained by 90% of respondents with 78% of these being doctorates. It seems that these scholars understood the importance of perseverance to their success. One remarked, “Great rewards most often come from great struggles” (Kaufmann & Matthews, 2012, p. 87). Kaufmann and Matthews concluded, “When we honor young people’s achievement, we must help them understand that an award is a beginning, that early promise must be followed by years of hard work and perseverance” (p. 92).

A further study demonstrating the importance of perseverance in achievement was undertaken by Duckworth et al. (2007). The research sample of 3500 participants included Ivy League university undergraduates, West Point cadets and National Spelling Bee contestants. The study explored the impact of ‘grit’ on achievement. Duckworth et al. stated: “We define grit as perseverance and passion for long term goals. Grit entails working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity and plateaus in progress. The gritty individual approaches achievement as a marathon....” (pp. 1087-1088). The study

utilised a “grit” scale to compare students. Students who were identified as ‘gritty’ outperformed those who were less gritty and had higher Grade Point Averages (GPAs). Duckworth et al. (2007) concluded, “Grit may be as essential as talent to high accomplishment” (p. 1100). Interestingly, in Morales’ (2010) study the most significant protective factor of all was persistence, with 94% of students indicating this had contributed to their academic success.

In New Zealand also, perseverance has been linked to high achievement. Horsley (2009) studied factors secondary school students considered had contributed to their success in the New Zealand Scholarship examinations. Significantly, 68.7% of males and 53% of females indicated persistence had some role to play in their achievement with some of these believing it was a major influence. One student remarked, “Anyone can improve their ability through persistence” (Horsley, 2009, p. 97). Faaea-Semeatu (2011) comments that Pasifika students are supported to react to failure with perseverance. She elaborates: “Rather than wallow in self-pity, Pasifika students see setbacks as opportunities to aim even higher and achieve to their personal best so that they are able to react more positively in any given situation” (p. 118).

Perseverance of a similar nature to examples cited above was demonstrated by Tauaarangi and Vamana in this study. As previously indicated in the findings, both Tauaarangi and Vamana displayed perseverance in the way they approached their secondary schooling. Tauaarangi’s persistence in spite of personal traumas and rejection at school, exemplifies the influence perseverance can have on achievement. Moreover, Vamana’s sustained effort over time in overcoming the obstacles to learning implicit in adapting to a new culture demonstrated again that persistence contributes to academic success.

The students who attributed their success, at least in part, to volitional characteristics had what Dweck (2006) describes as a growth mind-set. They believed that their hard work, determination and perseverance would make a positive difference to their achievement. These intrapersonal traits, demonstrated by the students in this study, indicate growth mind-sets of the kind Dweck describes. In terms of this thesis, the intrapersonal qualities of a strong work ethic,

determination and perseverance all contributed to students' achieving academic success.

### **Identity**

While there are varying views on identity development there is general recognition that personal identity is significantly shaped by the sociocultural contexts in which individuals interact with others (e.g., Arnett, 2000; Erikson, 1968; Tanti, Stukas, Halloran & Foddy, 2011). Santrock (2012) posits that this process of developing one's unique self commences in early childhood and continues until "a life review and integration in old age" (p. 142). In Erikson's (1968) view, the teenage years are particularly important in generating identity because they are characteristically marked by what he terms 'identity versus identity confusion'. At this time, adolescents wrestle with opposing identities and adjust their perceptions of themselves accordingly. Tanti et al. (2011) concur with Erikson's view that the adolescent years are of critical importance in identity development. While acknowledging the importance of adolescence, Santrock (2012) regards adolescence and emerging adulthood as one phase of life in identity development. In his view, this period of life is significant for identity development because for the first time in people's lives they have the socio-emotional, cognitive and physical capacity to sort out and synthesise childhood identities enabling steps to be taken towards adult maturity.

In contrast to Erikson and Santrock, Arnett (2000) argues that 'emerging adulthood' (that is, 18 to 25 years of age) is a separate phase of life to adolescence. Furthermore, he postulates this is the key phase related to identity generation and a period which "offers the most opportunity for identity explorations in the areas of love, work and worldviews" (Arnett, 2000, p. 473). He claims "emerging adulthood exists only in cultures that allow young people a prolonged period of independent role exploration during the late teens and twenties" (p. 469). Furthermore Arnett believes emerging adulthood is a time when many people view themselves neither as adolescents nor young adults, a phase that has been prolonged from a brief period of transition as a result of demographic changes of the past 50 years. The notion that emerging adulthood is a separate period of life

is contested by Côté and Bynner (2008). They argue emerging adulthood is not inherently developmental but arises from an induced social condition. Moreover they consider Arnett's "concept of culture is an unconvincing evasion .... of what is between and within cultures" (p. 253) and that the issue of social class has been dealt with superficially in the emerging adulthood model.

For several students in my study "what is between and within cultures" (Côté & Bynner, 2008, p. 253) was a very significant aspect of their unique selves because it related to their racial-ethnic identity. This has also been found to be the case with other New Zealand studies involving gifted and talented Māori and Pasifika students. The gifted and talented Māori and Pasifika students involved in Webber's (2011a), Ballam's (2013) and Macfarlane et al.'s (2014) studies characteristically had strong awareness of their personal identity. Indeed, Macfarlane et al.'s study listed identity (*tamatekapua*) as the first of the eight beating hearts<sup>59</sup> of Te Arawa sourced from the ancient world that impact positively on student learning. For the Māori and Samoan students in Webber's study, their racial-ethnic identity was more important in the school setting than it was for Pākehā or Chinese students. Their strong racial-ethnic identity helped them to successfully counter negative stereotyping and to achieve well in their academic studies. In the United States, a study of African American, Latino American and European American early and middle adolescents found that during the middle adolescent years, group esteem rose more for Latino American and African American students than it did for European Americans (French, Seidman, Allen & Aber, 2006). This analysis suggests ethnic identity was generally more important for the African American and Latino American students.

As outlined in the findings, several students in this study made reference to aspects of their identity, particularly with regard to their racial-ethnic identity. Anaru's strong awareness of his personal identity enabled him to be a very effective cultural straddler appreciating and embracing the three different cultural worlds he straddled in the school setting. He appeared unconcerned about negative stereotyping of Māori and Pasifika students. Henare proudly identified as

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<sup>59</sup> The eight beating hearts are part of Ka Awatea: A model of Māori student success. The hearts are: identity, diligence, relationships, creativity, wellbeing, scholarship, humility, and values.

Māori from Year 10 onwards, and also strongly identified as an academic student demonstrating that he too was an effective cultural straddler. Petera's background in a kura kaupapa Māori school had contributed much to his strong Māori racial-ethnic identity at the commencement of his secondary schooling, but he adapted well to a mainstream boys' school indicating that, like Anaru and Henare, he had become an effective cultural straddler. For these three boys (like the cultural straddlers in Carter's (2006) and Webber's (2011a) previously discussed studies) it seems they all had developed a cultural flexibility that had equipped them to confidently take their place in multiple cultural contexts. Webber (2011a) explains the benefits of such cultural flexibility: "Culturally flexible students possess the ability to interact across different social and cultural settings, embrace multiple forms of cultural knowledge and expand their own understanding of self. They can also hold inclusive perspectives about others who differ in myriad social aspects or identities" (p. 162). Barack Obama is viewed by Morton (2014) as the ultimate 'code-switcher' (or cultural straddler). She states, "Code-switchers appear to be able to navigate two (or more) distinct communities and reap the benefits of belonging to both" (p. 259). For the cultural straddlers in Webber's study and this study, it seems they have embraced the philosophy of Sir Āpirana Ngata: "Turn your hand to the tools of the Pākehā for the wellbeing of your body. Turn your heart to the treasures of your ancestors as a crown for your head" (Walker, 2001, p. 397).

As mentioned in the findings, altruism as expressed in a service orientation appears to have been an important element of personal identity for three students, Anaru, Taniera and Henare. The interviews suggested that all three of them used their initiative to find ways to care for and be of service to others. Jones and Hill's (2003) study linked voluntary community service to the development of students' identities as well as their motivation. Students who had been marginalised, for example, for being in a minority ethnic group, found community service transformational because it moved them beyond the pain of their experience to develop compassion and empathy for others. Astin et al.'s (2010) study linked charitable involvement (including community service, assisting friends with personal difficulties and donating to charity) to improved college grades, higher intellectual self-esteem, leadership development, psychological wellbeing and

greater understanding of other cultures and races. This is a large claim, and while a link has been evident in the data, there may well be multiple other elements also contributing to positive outcomes. Even though a service orientation seems to be linked to beneficial results in multiple other domains, it does not in and of itself, guarantee outcomes of this nature. Interestingly, two of the three students in this study who were service oriented became the top academic Māori/Pasifika student in their school. Service to others is of such importance to Māori that Bevan-Brown (2011a) believes, when teachers are seeking to identify gifted and talented Māori students they should first “look for those who are ‘being of service’” (p. 92). She considers that while service to others is one category of giftedness it is also integrated into many other categories. In Miller’s (2003) research, bringing the community together and working for the benefit of others was recognised as an important indicator of giftedness amongst Cook Islands Māori.

As with the aforementioned students in this study, in Ballam’s (2013) study, the students had a clear awareness of the characteristics and abilities that shaped their identities. In her study, 90% of them commented on their academic abilities and 75% on their leadership abilities. Not only were they able to identify their abilities, but Ballam found that their strong self-awareness conveyed understanding of how their talents had emerged. Whiting (2009) proposes that high self-awareness is also a feature of African American males who achieve academic success. He argues these students understand their personal strengths and limitations, and do not allow their weaknesses to inhibit their desire to achieve. Furthermore, they initiate ways to adjust and compensate for their limitations. For 84% of the students in Ballam’s study (2013), key aspects of the development of talent were self-confidence and high expectations. Academic self-confidence and associated high expectations were also viewed by Whiting (2009) as fundamental to the high achievement of gifted African American males. These same aspects of identity development featured in the accounts of Tauaarangi and Vamana in my study, already outlined in the findings. Tauaarangi had the confidence that he could achieve more highly than the school’s entrance data suggested and hence was promoted to a higher class in Year 10 and then again in Year 12. Vamana’s expectation was that even if he had to resit assessments he would be able to study effectively enough so that he would pass at the next opportunity.

### **Summary**

These findings suggest that intrapersonal characteristics are a significant element in the development of students' talents and that it is important therefore, for whānau and educators to understand the role these qualities play in student success. The students and whānau involved in this study identified four primary intrapersonal traits that were considered to be influential in student achievement: a strong work ethic, determination, perseverance and identity. It seems none of these characteristics featured in isolation, but their complex interplay contributed to high student achievement.

The first three intrapersonal qualities discussed were all volitional in nature, requiring students to exercise their wills. The most frequently mentioned by interviewees was a strong work ethic. This was an acknowledgement that without the preparedness to put in the sustained effort to achieve there would not have been the good academic results these boys enjoyed. It was significant that the majority of the students, who commented on the importance of a strong work ethic, realised its importance as a result of initially being placed in a class lower than that which they expected. They then realised how important a strong work ethic was to prospects for advancement. Several students and whānau considered that determination was important to their success and likely to be demonstrated through self-motivational behaviours including the setting and pursuit of goals. Intrinsic motivators included achievement, future career goals, passion for a subject and countering negative racial-ethnic stereotyping. The two students whose secondary schooling experience appeared most characterised by perseverance both had to overcome adverse circumstances in order to achieve.

In terms of identity the major issue for students was establishing an identity both as an academic student and as member of a minoritised racial-ethnic group. Students who were particularly successful at this can be described as cultural straddlers. It is significant that the students who stood out most for their ability to straddle cultures also featured amongst those who spoke of their volitional

characteristics. For some students other important aspects of their identity were a service orientation mentality, and self-confidence or self-belief.

## **Chapter Seven: The influence of teachers and schools**

This chapter presents and examines the findings related to the influence of teachers and schools on students' learning. The findings themselves, and the following discussion, outline and comment on the voices of students, parents, teachers and other participants in the research as gathered in interviews and questionnaires, as well as data obtained through classroom observations. Many of the comments made by parents indicate a generally positive impression of the schools their boys attended. From the interviews it appears that for some students, teachers and/or the school played a significant role in enabling them to achieve academically and enjoy attending their secondary school. Thirteen boys out of 30 and five parents out of 14 specifically mentioned the part played by teachers and/or the school in the boys' success.

In interviews with students from School A and B, 22 characteristics or qualities of teachers or their pedagogy were cited as contributing to their academic success. Eight of these characteristics were also identified by parents. Five teachers were identified by students as making a particularly positive difference to learning outcomes. All five were observed formally teaching the class, and also observed in more informal classroom interactions. These teachers exemplified many of the characteristics of effective pedagogy identified by students and parents. In addition, observations were also conducted in eight other classrooms, but it was decided to focus primarily on the students' and parents' comments and my observations in the five classrooms taught by the teachers identified by students; because it seemed the most effective pedagogy was observed in these classrooms.

### **Results**

#### **Relationships (Whānaungatanga)**

In interviews, students and their parents were specifically asked how well Schools A and B had provided for intellectual, emotional and cultural needs. Some students and parents spoke of the care provided by both regular classroom teachers, and also other teachers in the schools with whom they had contact. Nine students spoke of the way they valued and appreciated teachers who focused on

building positive relationships and knew students well. All five of the teachers that students mentioned as making a particularly positive difference for student learning, appeared from the students' comments and my observations, to be relationship focused. One of these teachers commented that he had spent 30 years teaching, most of that time in schools with a high proportion of Māori and/or Pasifika students, and he had been a participant in the Te Kotahitanga project in a school at which he had previously taught. He appeared from his comments, to be acutely aware of the importance of building relationships, particularly with Polynesian students. He wrote the following statement in response to a questionnaire request asking him to: "list the ways you currently provide for the needs of gifted and talented Māori and Pasifika students".

I have found it important to engage with students (i.e. talk to and treat them in a caring, respectful manner). Try to involve other interests – time out of class, sports etc. Just show that you care. Show interest in them as a person, not just as a pupil at school. I have found this particularly important for Polynesian students. Greet them in the playground on the way to class, etc. Enquire about their interests, family, goals. Just show care, respect and humour. Interest must be genuine, not superficial or affected. Be fair and consistent in rules. Lead by example (e.g. never be late for class, be well prepared). These latter two are more important for Polynesian students I believe.

Mareko's mother considered Pasifika teachers had been relationship focused in helping her son. She stated that they were providing for his cultural needs as a Pasifika student. She commented, "They are putting together the pieces so it will be best for the Pacific Islands' student".

One teacher I observed seemed particularly relationship focused. The field notes document the positive in-class interactions. Tauaarangi referred to this teacher as one who had been very helpful to him, stating: "It's so easy to learn because everyone enjoys going to his class. Oh, it was great"!

It seems, however, that not all teachers were relationship focused. Tamati commented on the differences in teacher-student relationships within the six

classes he attended. He stated that two teachers treated him well, in some ways like an equal, two were the exact opposite and two were neither. The latter teachers he thought of as good teachers and did not “have any problems with them” but said, “You would not stay after class and have a good 10 minute chat with them”. Commenting on teachers with an authoritarian style he observed:

With some teachers it is like, ‘You are a student. I am the teacher. You shush, sit down and listen to me.’ You are like, ‘Oh, but we could have a much better relationship from student to teacher if we treated each other as an equal. In that way we would learn a lot more from each other rather than you just being, ‘I’m a teacher. I know everything’.

Tamati equated good relationships with a teaching style that was not authoritarian and conveyed respect to students. In his view, two of his teachers demonstrated their focus on relationships and treated him with respect, something he valued and also desired from the others.

Both School A and B had a network of deans who were responsible for providing pastoral care for students. The few general comments about deans by parents and students were positive. For example, in answer to a question about how the school met her son’s needs, particularly in terms of the school being a safe and secure place, Atama’s mother responded, “I take my hat off to the deans as well as the principal here. Regarding Atama’s safety; I think they’re very efficient. They’re very firm in what they do. The way they monitor them is an A+ in my eyes. They really do a great job there”.

However, there were two students who expressed unhappiness with the way their particular issues had been dealt with by the deans, and who considered they could possibly have been handled better. In these cases the question arises as to the extent that *whānaungatanga* was evident in the deans’ interactions with the students. One of these students, Tamati spoke at length about what appeared to be significant on-going conflict with the deans leading to him receiving approximately 10 to 12 deans’ detentions in one term. From Tamati’s comments, the basic issues appear to be that he decided to rebel against the school’s uniform rules and ask the deans to justify why the rules were in place. Tamati stated that,

according to the school, repeated detentions are supposed to be a bad thing but to him it was, “no big deal”. In fact, he admitted it was “quite a fun thrill” to get into arguments with the deans.

One way in which teachers built relationships with students was through humour and fun. Two students and one parent spoke of the significance of humour and fun in helping students to learn and these were evident in two of the classrooms in which I observed. For example, the computer animations in a mathematics lesson were humorous. Humour was integrated into the lesson and students’ attentive responses and laughter indicated that it added to their engagement in the lesson. Tauaarangi commented that two of his teachers had a sense of humour that contributed to the positive impact they had on learning. He contrasted them with teachers at his previous school, of whom he stated: “They kind of suck the life out of you education wise because it’s not fun”. In his view, “You have to enjoy the class to learn”. Some parents also commented on humour. For example, the mother of Werahiko described how one teacher her son had at primary school had a particular impact on his learning. She said the teacher had, “the most warped sense of humour,” but he had a “massive influence” on Werahiko and in that class he “developed a love of learning”.

Positive comments and encouragement were also mentioned. Students spoke of the positive comments teachers made to them, and Tiare also talked about how receiving a special note home to his parents was significant for him. He remarked, “You know you’ve done well and you’ve got something to show and you take it home and your parents get proud of you”. Another student, Taniera remarked how a teacher’s encouragement enabled him to achieve well in a subject in which he had previously struggled. In four of the classrooms I observed, encouragement of students was a prominent feature of the way the classroom operated. Not only were correct responses to questions affirmed, but also the willingness to contribute even if the response was not as accurate or as detailed as the teacher may have desired. My field notes on one observation recorded:

This is an emotionally safe place for students. There are no put-downs of students by their peers. You are so affirming to students that they contribute freely to discussion. You make sure that as many students as

possible have the opportunity to contribute. Māori and Pasifika students contributed freely to discussion. They were totally engaged in the lesson, as were the rest of the class.

However, this is not to claim that observations pick up all that is happening or that every class had such a climate. For instance, Mataio described a very different environment. He recalled:

Sometimes, the hard stuff, I get too scared to do it and so therefore in class, if I find something is too hard I probably won't ask the teacher because what I find hard is probably easier to some of the other guys in class. If I were to ask I'd be intimidated by the fact that I'd probably get mocked and so I just keep it to myself and then later on I'll just go and look it up myself and do my own sort of studies. That way I feel more comfortable.

Mataio also referred to “under-the-table” name calling of a racist nature that occurred in multiple classrooms in Year 9 and 10, stating that he did not think his teachers were aware of it.

Three of the students and one parent spoke of the power of teacher expectations influencing achievement. While all classes by their very nature were working at a high level for their age (and therefore high teacher expectations were implicit for the group as a whole), there was one class observed where these expectations were particularly evident. In this class, students had just received back a recently marked assessment. The teacher clearly explained how to move from the Merit to Excellence level. In discussion, while the teacher affirmed all students' responses to a question, she was not satisfied with superficial responses nor did she tell students the answer. She kept probing until she elicited an in-depth response.

Several students spoke of the teachers pushing them to achieve. These teachers had the expectation that the students could achieve and would achieve if they applied themselves. One student, Isaako, stated that he wanted to be the first one from his family to go to university and to be a role model for his siblings and other Pasifika students. When I asked him what had given him that desire his initial response was, “I think I just woke up one morning and decided to go for it”.

However, as we conversed further it seemed a teacher's expectations had played a part in forming that desire. Isaako had changed schools at the start of Year 11. Of this teacher he stated, "She said I had a huge potential in doing well in NCEA if I just put my head down and worked hard so I took that into consideration and did quite well for myself". Isaako acknowledged that the teacher's belief in his ability and expectation that he would do well was key to developing his own self-belief.

In sum, there seemed to be awareness in both schools of the importance of building positive student-teacher relationships and a commitment by the senior management to make this a priority. From the start of 2010, School A became a participant in the He Kakano project and School B became a participant in the Te Kotahitanga project, both of which emphasised the significance of student-teacher relationships in enhancing student learning.

### **Curriculum (Marautanga)**

There are several principles of the curriculum that students and/or parents identified as contributing to student achievement. Twelve students and two parents identified adequate challenge as important. Linked to challenge is the principle of depth or complexity of content. Feedback was sought from interviews with students about how challenging they had found programmes as well as seeking parents' perspectives. During the course of interviews with students, several mentioned that the work in the GATE classes was challenging, one commenting on the significant increase in the difficulty of work compared to intermediate school with this student saying he enjoyed the greater challenge.

The only students who discussed a lack of challenge were the four boys who began their secondary schooling in a two-band class but also were later promoted. One of these, Rawiri, said he did not want to stand out when he came to high school and as a result he was pleased to be in a two-band class. During the course of the year he said he realised he was consistently achieving more highly than the majority of his classmates and his observations led him to believe the quality of teachers in the one-band classes was better, to the detriment of students in the two-band. As with the other three boys, he commented that getting promoted was

something for which he needed to take personal responsibility. Rawiri, along with the other three boys, stated that he worked hard for promotion and attained it, and then found the work was at a more challenging level.

Petera's parents were concerned about the lack of challenge their son received in te reo Māori. He came from a Kura Kaupapa Māori and arrived at his secondary school with a level of fluency that they said would have enabled him to comfortably manage Level 1 NCEA in Year 9. In contrast to some of his former classmates who went to another secondary school and were able to study NCEA Level 1 in Year 9, he was required to wait until Year 11 to work at this level. Aside from this, Petera's parents were happy with the level of challenge provided in other subjects.

Acceleration in the pace of learning was evident in both schools as detailed in schemes of work that were observed being implemented as well as in *EHSAS Milestone Reports 1, 2, 3 and 4* (School A, 2006, 2007, 2008, 2009). All core subject faculties (i.e., English, mathematics, science, and social studies) had differentiated schemes of work for GATE classes. In School A the curriculum was compacted for at least four Year 9 classes in social studies, three in science and two in mathematics to enable the normal Year 9 and 10 key content and skills to be taught within the one year. These measures enabled Year 10 students to complete up to three NCEA Level 1 courses a year earlier than normal. In both schools, beyond Year 10, the introduction of the CIE courses (which several students and teachers reported as having greater academic challenge than the equivalent NCEA courses) provided accelerated content and skills.

In addition to the greater challenge, depth and faster pace provided for one-band students, Rawiri mentioned a teacher's coverage of her subject was comprehensive, suggesting breadth in her teaching. Werahiko's mother also commented that one of the reasons he had learned well from a particular teacher was that this teacher went beyond the normal curriculum in what he taught.

An area, in which breadth could have been evident, but appeared to be given little attention based on observations in 13 classrooms, was that of inclusion of contexts

of cultural relevance to Māori and Pasifika students. None of the 13 teachers observed drew upon such contexts. However, an English teacher remarked that instead of looking to provide specific Māori contexts for study, teachers have moved towards educational principles such as links to community or links to the land. She elaborated:

If we can find a link to the land issue in a text we can do that. The one that works best in English for Māori and Pasifika students is the metaphysical connectedness because you can get quite sophisticated links back to the notion of essential Māori principles and I think that makes a bigger difference than if we bring in specific texts.

While the teacher did not view the “metaphysical connectedness” as a “specific Māori context”, it may be viewed as a wider context relevant to Māori as it makes connections to their world view and their traditional values. The hui students attended (discussed later in the chapter under the subheading *A place to stand*) provide examples of breadth and going beyond the normal curriculum.

### **Implementation (Whakahāngai)**

From Rawiri’s perspective, an important aspect contributing to his success was teacher planning to meet student needs. He commented that he had a “big work load” but that the teachers knew the nature of the work load and planned so that they “set aside the amount of time that we needed”. Some teachers planned their schedules in order to provide extra tuition to students in lunch and morning tea breaks.

Four of the students I interviewed commented on the way teachers had made themselves available outside of regular classroom time to support students with their learning. While observing in a classroom, another student also commented how the teacher always made herself available for extra tuition in intervals and lunch times. Another teacher, for example, said that he did not go to the staffroom during interval and lunch time, but remained in his room making himself available to provide extra support for students, and not only for those taking his classes but also others taking his subject in other classes. From students’ comments, it

appeared that another teacher was also available at almost every interval and lunch time to assist students in her subject as well. In all three cases of which I was made aware, the comments were verified by informal observations.

From student accounts, from the commencement of Year 9, a range of non-compulsory subjects were provided from which they had the opportunity to choose. Tiare commented that “it was good being able to choose” between NCEA Level 1 History and Geography in Year 10 because it enabled him to select History, where his interests lay, rather than to continue with Social Studies which he described as “basic”. Iosefa expressed appreciation to his headmaster and another teacher for introducing Samoan Performance into the school as an NCEA subject enabling him to pursue his interest in keeping his connection with his cultural roots alive at the same time as gaining a recognised qualification. From the interviews with Māori students, almost half were appreciative of the opportunity to pursue their interest in kapa haka. Their comments suggested this was an important statement of their identity as Māori.

A number of boys also commented positively on the importance of feedback to aid improvement, technology and visual aids for clarifying concepts, learning how to learn to provide focus for classroom work and study, and teachers who gave one-to-one help.

### **A place to stand (Tūrangawaewae)**

Both School A and B had in place organisation strategies and staffing to provide students with opportunities to develop their racial-ethnic identity and grow and nurture their aspirations. The support given to students through tutor teachers, mentor teachers and senior management was significant for some in meeting their emotional, intellectual and cultural needs, and providing them with a place to stand. In School A, where Māori and Pasifika students were in a minority, tutor groups were allocated specifically for Māori or Pasifika students if they or their parents chose for them to be part of these. The majority of the Māori students I interviewed chose not to be part of the Māori tutor group, but all the Pasifika students chose to be part of the Pasifika tutor group. In School B, where Māori

and Pasifika students were a majority, no tutor groups specific to ethnicity were provided. However, the tutor teacher's role was mentioned by students as important in both schools. From the comments of several Pasifika students it appeared that the tutor teacher had a strong focus on providing students with a sense of security and a place of belonging. For example, Salē stated, "You can feel safe at this school, like being in the PI [Pacific Island] tutor group you are treated like family, not as a student so you can have that confidence to go and talk to your tutor teacher. You can talk to him more as a friend, as someone to look up to".

In both School A and B, mentoring was regarded as an important part of providing support to gifted and talented Māori and Pasifika students and developing their aspirations. Several students reported on the benefits gained from both one-to-one, and group mentoring programmes. Some of these involved a teacher or other adult in the mentoring role whereas others involved senior students in the mentoring role. One example of mentoring was a senior teacher who had a mentoring role with the four top academic Pasifika Year 10 students. He spoke of meeting once a fortnight with the students for six months and then less frequently after gaining additional responsibility in the school. As part of the mentoring programme, the mentor-teacher took the boys to university for the day to explore the STEAM (science, technology, engineering, architecture, and medicine) programme. This was a special initiative of the university aiming to encourage Pasifika students to study in these fields. Regarding this event, Salē commented, "It was pretty cool going there. It opens your eyes to all of the opportunities if you work real hard". Taniera remarked, "We went to some really good courses which got us interested in really good lines of work. It's setting us up for the future. It's getting us prepared". The mentor-teacher stated that one of his goals was to see the boys become leaders. The boys had achieved that goal by the end of Year 10 with all four chosen as junior leaders. One of these, Taniera, was also selected as Head Boy of the school in Year 13.

A Pasifika teacher who worked in partnership with the mentor-teacher stated that the goal of their work with the Pasifika boys was "just to bring that brotherly love" and to then have that impact on their achievement. Both these teachers had been

active in assisting in the Pasifika tutor group. Taniera recounted the way they came to the tutor group and checked the boys' diaries, checking that their homework had been written up. Furthermore, some senior students took on a mentoring role to junior students in a role similar to that of the aforementioned teachers. A senior Māori student mentioned his role in a tuakana-teina type relationship assisting a younger Māori boy to adjust from a kura kaupapa Māori primary school to a mainstream secondary school. Other initiatives related to pastoral care were the two fono<sup>60</sup> the teachers organised, one for the parents of all Pasifika students and one specifically for the parents of gifted and talented Pasifika students. Two Pasifika students viewed a deputy headmaster in much the same way they viewed their tutor teacher with Salē stating that “personal issues could be discussed” with him, and he was confident that “help would be given”.

In addition to mentoring provided through regular school programmes, three combined school hui provided opportunities for gifted and talented Year 9 and 10 Māori students to develop their academic aspirations and grow their leadership skills. In response to a question about how well the school had provided for the boys' emotional, cultural and intellectual wellbeing, a kaumatua spoke of the positive impact of the hui on the students. Thirteen boys, five parents and six teachers also spoke of the benefits of the experience. The potential for some intensive pastoral care and relationship building was provided by bringing the students together to live in a small group of 20 to 30 students with several adults for the weekend. Students interacted with each other and participating adults in a range of activities during the weekend with comments suggesting students felt supported and encouraged in the development of their aspirations by the teachers and guest speakers. Petera elaborated, “It was good they had a range of Māori guest speakers from politicians to television presenters. It was good that they gave us their message on how they achieved and what the obstacles were plus some of the guest speakers gave us the message, ‘Keep striving no matter what obstacles are in your way’”. Rawiri spoke of how one of the speakers was a former head boy and dux of his school and how he put in the hard work to achieve both feats. This speaker had come from what the kaumatua described as a “deprived

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<sup>60</sup> Meetings, in this context involving parents, teachers and students

background” and had not only gone on to become head boy and dux, but also to win the national Manu Korero competition (speech competition for Māori students) for speeches in English. The kaumatua considered that boys who were at the hui were able to identify with him because of their similar home circumstances. Rawiri viewed his presentation as encouragement that if he continued to put in the hard work he would probably succeed.

In addition to listening to motivational talks the boys undertook some outdoor activities. The one which drew most comment was the experience of being in a team rowing a waka<sup>61</sup> a considerable distance on the lake in cold conditions. This provided a challenge that went beyond the normal curriculum, and was part of the teachers’ planning for students to connect with their cultural roots and build a sense of teamwork. At the end of the hui Rawiri stated that all participants wrote themselves a letter outlining their key short term goals and what they planned to do to achieve them. The letters were kept by the organisers and mailed to the students a few months later. Rawiri commented that he was pleased to find that he had achieved most of his goals.

Reflecting on the hui several months later, Atama’s mother said, “The impact on Atama was a positive impact, very encouraging. It brought a lot of confidence to Atama’s life because he’s very whakama<sup>62</sup> about having an audience or performing in front of others”.

A further way a place to stand could be provided was mentioned by Tiare who considered Māori students would benefit by having a marae built at the school. He commented, “I think it would give the Māori students a place where they could come to school where we can all be. If you go in there you always feel safe like, because it’s your whānau”. Tiare also thought students of other ethnicities such as Asian and Somali students would benefit from a marae.

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<sup>61</sup> Canoe

<sup>62</sup> Shy

## **Discussion**

There are many attributes and teaching practices of teachers considered important in teaching gifted and talented students categorised as personal-social characteristics, intellectual-cognitive characteristics and teaching strategies (Vialle & Tischler, 2009). The gifted and talented literature also acknowledges the importance of the school curriculum (e.g., Ford, 2011; Little, 2012; Macfarlane et al., 2014; VanTassel-Baska & Stambaugh, 2006). Furthermore, the way the school groups its gifted and talented students, including whether or not they are ability grouped can impact on their achievement (Fiedler, Lange & Winebrenner, 2002; Rogers, 2007). Almost half of the participants in my study identified teachers and schools' ethos as significant influences in their achievement. Even for those who did not, these influences were part of their lives since they were five years of age.

The findings may be viewed in terms of a Māori metaphor, the mangō pare. The Mangō Pare Model of Pastoral Care and Pedagogy for Gifted and Talented Māori and Pasifika Students (Mangō Pare Model) shown following, synthesises the findings. It incorporates the key characteristics and qualities identified by students and parents. The characteristics and qualities which are asterisked (\*) are those mentioned both by students and parents. Most of the characteristics mentioned in the students' interviews were evident in observations. It should be noted that the characteristics or qualities identified often overlap. For example, providing encouragement and being caring are closely related.

Before including the model in this dissertation I submitted a copy with the explanation to two Māori educators and two Pasifika educators for their feedback. All four approved its use. One Māori educator commented:

The metaphor and explanation looks great. Using a hammerhead shark is very significant. There is a whakatauki that reads, "Kaua e mate wheke, me mate ururoa." (Don't die like an octopus. Die like the hammerhead shark.) The explanation behind the proverb is as follows. Octopus is renowned for their lack of resistance when being captured. However, a hammerhead shark will fight bitterly to the end to the point, when you

fillet it fresh, its meat quivers. It is commonly used to encourage someone not to give up, no matter how hard the struggle is.

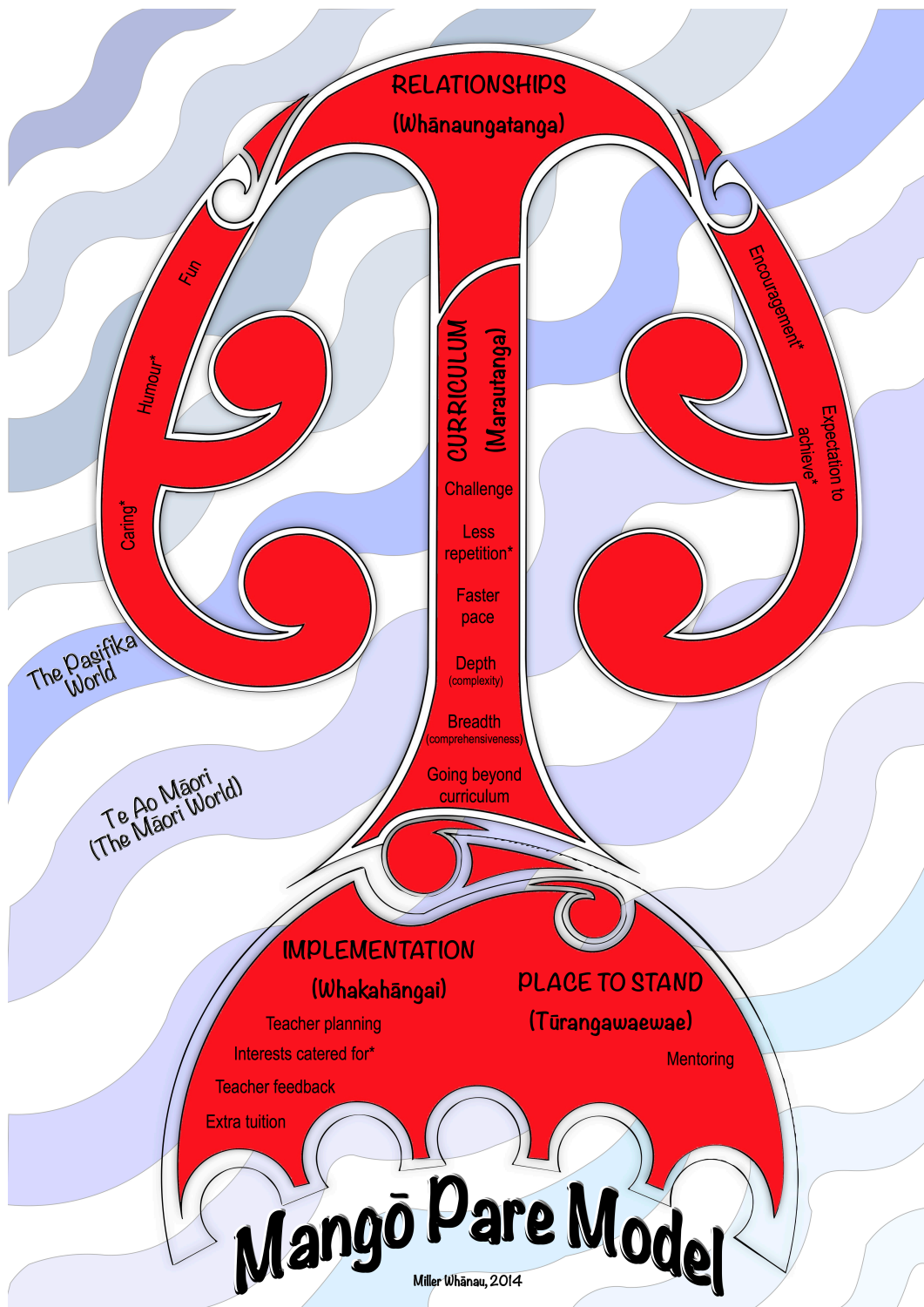


Figure 3: The Mangō Pare Model (Miller whānau, 2014)

Each of the characteristics relate to effective pedagogy starting with relationships. Relationships (whānaungatanga) are placed at the head of the mangō pare (hammerhead shark) to symbolise strength, courage and confidence. The tuaiwi (backbone) of the mangō pare is the curriculum (marautanga). Branching from the base of the spine is the tail (roa) with two parts symbolising direction and momentum: implementation (whakahāngai) and a place to stand (tūrangawaewae).

Relationships are at the head of the mangō pare because they are fundamental to the curriculum and its implementation, and provide students with a place to stand. Without positive relationships other aspects are likely to be diminished in their effect. Each of the pieces of the model fit together uniquely to portray the interconnectedness of all aspects of pastoral care and pedagogy. The mangō pare is not inert but swims in the currents of te ao Māori (the Māori world) and the Pasifika world which bring life and sustenance. Aspects of relationships, the curriculum, its implementation and a place to stand were all discussed by students and parents during the course of interviews.

While the Mangō Pare Model has been developed from the data gathered in this research, it may also have wider applicability. Certainly the centrality of teacher-student relationships to positive student learning outcomes is attested in the literature outside of the gifted education field (e.g., Bernstein-Yamashiro & Noam, 2013; Bishop et al., 2014; Gehlbach, Brinkworth & Harris, 2011).

### **Relationships (Whānaungatanga)**

The interview data and classroom observations revealed that teachers who were described as contributing to students' achievement had a major focus on building positive relationships. They were reported to have made a significant impact on gifted and talented boys in both schools. In the observations reported in the findings, the relationship focus of the teachers was evident. None of the students informally questioned in the classrooms as part of the observations had anything negative to say about the class or the teacher, but provided significant feedback about what they liked. They mentioned aspects such as, caring, support, humour, fun, encouragement and the expectation to achieve. The teachers' attitudes and

actions conveyed a depth of interest in the students accompanied by warmth and concern reflecting *whānaungatanga* in action. In 2011, the Ministry of Education set the goal of “Māori achieving success as Māori” in the expectation that teachers develop five cultural competencies, one of which is *whānaungatanga*, defined as, “actively engaging in respectful working relationships with Māori learners, parents and *whānau*, *hapū*, *iwi* and the Māori community” (Ministry of Education, 2011, pp. 2, 4). The importance of caring relationships was evident in comments, not only by a teacher previously cited in this chapter, but also students and their parents.

A number of studies have found that this relational aspect is important to student achievement (e.g., Croft, 2003; Macfarlane et al., 2014; Reichert & Hawley, 2010). Croft (2003) commented, “Gifted students appear to be more profoundly impacted by their teachers’ attitudes and actions than are other students. The roles played by teachers of the gifted go far beyond the role of the classroom teacher” (p. 558). While Croft’s assertion that gifted students seem to be affected more by their teachers than other students may be contestable, it nevertheless does raise an important issue. Should schools take particular care over the selection of the teachers allocated to classes of gifted and talented students? Or are they, as Rawiri suggested, in terms of his school, already doing this? And is this to the detriment of students in two and three-band classes who would benefit from being taught by these same teachers? Analyses of mathematics achievement data from 100 middle schools and high schools in the United States led Betts and Shkolnik (2000) to suggest schools may be allocating staffing to different classes inequitably. They found that in schools with ability grouping, higher ability classes were more likely to be taught by teachers with Masters degrees and were more likely to have more experienced teachers than lower ability classes. However, Betts and Shkolnik acknowledge it is conceivable that the disparity in teacher allocations may be related to the desirability of high-ability students being taught by teachers with higher qualifications. Nonetheless, having higher qualifications, and being more experienced, are not necessarily indications of teacher quality, although it is noteworthy that there was a clear difference in how teachers were allocated to classes.

The teachers of talented teenagers in Csikszentmihalyi et al's (1993) study most liked by students were those who "demonstrated an abiding concern for them, could be counted on for support and stimulation, and cared about their interests" (p. 249). The importance of teachers being relationship focused was evident in Keen's (2004) New Zealand research project, *Talent in the New Millennium*, where staff, students and parents identified the first desirable quality of teachers of the gifted as those who, "Show depth of interest in, and warmth and concern for, her/his students" (p. 279). Keen's participants agreed that, "the teacher is more important than the programme, and who the teacher is matters more than what the teacher knows" (p. 279). While this was the perception of participants in Keen's study, it is debateable whether the teacher is actually more important than the programme. Would it be better, for example, to have a teacher with a strong relationship focus delivering a programme with inadequate challenge or a teacher with less strong relationships delivering a challenging programme? In reality, both the teacher and the programme are important to providing positive learning experiences for gifted and talented students. Importantly, Bishop et al. (2014) found that Māori students spoke in detail about the significance of *whakawhānaungatanga* and *whānaungatanga*. It was notable to them that teachers cared for them as Māori and as capable learners. Macfarlane et al. (2014) also identified the importance of positive student-teacher relationships, identifying relationships as one of the eight beating hearts of Te Arawa involved in student success.

Positive relationships with teachers featured in Horsley's (2009) study of factors to which successful scholarship students attributed their success. Approximately 79 per cent of these students stated that a teacher was the most significant individual contributing to their success. Students, who were interviewed, as well as those completing the on-line survey, identified the importance of developing a relationship with at least one teacher. Positive student-teacher relationships were claimed to encourage the development of self-confidence in the students as well as cultivating a certain loyalty towards the teacher concerned. It seemed this loyalty meant that students did not want to disappoint the teachers concerned by failing to gain a scholarship.

In this study, the student-teacher bonds that developed in classes with relationship-focused teachers portrayed to some extent the Māori concept of kotahitanga as well as whānaungatanga. For example, one teacher said he deliberately built caring informal networks with students by asking about their families and interests, greeting them in the playground as well as having fun in the classroom. Other teachers also deliberately set out to build positive relationships, and under these conditions, students and teachers appeared to understand and trust each other with discipline issues seemingly non-existent. All observed interactions between teachers and students, and student to student seemed respectful.

However, respectful interactions between teachers and students are not always a feature of secondary school classrooms. Tamati drew comparisons with three types of teachers – the authoritarian teacher; the teacher who taught content well but did not focus on building relationships; and the teacher who prioritised developing relationships with students, and by implication, was also a good teacher. The question arises whether teaching styles make any real difference to students. Thijs and Verkuyten's (2009) study of approximately 500 students in a multi-ethnic school examined responses to three different styles of teaching: authoritarian, authoritative and permissive. They discovered students' situational engagement was greatest with the authoritative teacher and least with the authoritarian teacher. It is likely that if student engagement was least with the authoritarian teacher the level of learning would also have been at its lowest with the authoritarian teacher. There is little doubt that if the teachers Tamati desired to become more relationship-focused were to fulfil his desire then not only he, but others as well, would learn and achieve more. He suggested that he valued the informal discussions he had with relationship-focused teachers after class lessons. When the teacher is relationship-focused it is more likely that his or her advice will be sought and a positive difference will be made in the student's life.

It seems that students' perceptions of being cared for by teachers in their secondary schools may not be particularly common, certainly in the American context. Noddings (2005) claims that in large secondary schools of 1200 to 2000 or more students, the single greatest complaint of students was that their schools did not care. Noddings notes: "They feel alienated from their schoolwork,

separated from the adults who try to teach them, and adrift in a world perceived as baffling and hostile” (p. 2). Ironically, the teachers worked hard and spoke of their deep concern for students leading Noddings to posit teachers did care, but were not able to make the connections they desired.

The Māori and Pasifika students in this study in both School A and B generally felt cared for by their teachers. Even, Tamati who commented negatively on the authoritarian style of two of his teachers, and who had some conflict with a dean, still found teachers with whom he could build a positive, friendly relationship. While there were not many comments made specifically about members of the senior management team, the comments that were made indicated that they had a part to play in the pastoral care and provision of support for students. Arguably, those in leadership positions in School A and B were key influencers of the schools’ tone and set the agenda around expectations in relationship to student conduct. It seems from the interview data that the influence of senior management may have been greater on Pasifika students than on Māori. Interview data from three Pasifika boys suggests that the decisions made by senior managers and the relationships built by them with Pasifika students impacted positively on the quality of pastoral care provided. In Iosefa’s case, as stated in the findings, the pastoral care provision took the form of initiating better provision for his cultural activities. Two other Pasifika students specifically mentioned that a deputy headmaster had built a relationship of trust with students.

School A was a participant in the He Kakano project and School B participated in the Te Kotahitanga project, both of which emphasised the significance of teacher-student relationships in enhancing student learning. He Kakano (Ministry of Education, 2012b) had the expectation that school leaders would be agents of change in developing relationships with school staff, the students and the school community. Bishop et al. (2014) reported that all the students participating in the Te Kotahitanga project identified their relationships with teachers as the most important factor contributing to their classroom achievement. They linked caring relationships to pedagogy, stating that successful teachers knew what students needed to learn as well as how to lead students to that knowledge. It seems that an important part of a teacher’s ability to build positive relationships was reflecting

on their pedagogy and being prepared to change classroom practices to achieve synergy.

In terms of administration, when a caring attitude emanates from school managers it is more likely to become part of the school culture and to be evident in other staff and the students themselves. The three Pasifika boys already discussed indicated that they felt cared for by members of the senior management team. However, it cannot be claimed that all of the Pasifika boys felt cared for in the same way. Nevertheless, informal observations suggest that other Pasifika as well as Māori students may also have felt nurtured by some members of senior management.

Along with most New Zealand secondary schools there were many different cultures represented in both the schools involved in this study. Amongst the different ethnicities in the schools were Māori students and students from several Pasifika ethnicities. It was therefore important that school leaders were responsive to the different cultural groupings. Walker and Shuangye (2007) state: “Authentic intercultural leadership is particularly attuned to the values, beliefs and behavioral uniqueness of the students, teachers and others which comprise the community” (p. 185). In this study, indications that senior management staff were endeavouring to be attuned to the behavioural uniqueness, beliefs and values of Māori and Pasifika families were reported by students, parents and teachers. These indications included the emotionally safe environment most students and parents reported at school, the development of Māori and Pasifika programmes, the appointment of new Māori and Pasifika staff, the approachability of school leaders and the commitment senior management made to implementing the vision of Te Kotahitanga and He Kakano in their schools.

Within both School A and School B the deans carry specific responsibility for the pastoral care and support of students. The verdict of almost all of the students that I interviewed revealed that the school was a safe and secure place for them. One of the reasons for that may be the way the deans generally carry out their responsibility for providing for the pastoral care of students. Certainly, there was favourable comment about the work of the deans from several students and a

parent. However, there were two instances cited in the findings where there had been conflict between a student and a dean. In some respects it is surprising that there were not more accounts of conflict between students and deans given that gifted and talented students are likely to be more articulate than their peers and more prone to question the rationale behind decisions. Assouline and Colangelo (2006) indicate some underachieving gifted students are aggressive, rebellious and disruptive and use these behaviours as a means of control. This raises the question of whether School A and B's selection processes for GATE programmes have been weighted in favour of the compliant and conforming. Perhaps a more truly representative group of gifted and talented students would have a greater proportion of students who have been in conflict with the deans or other teachers.

As with the deans, from the interview data, it is evident that the tutor teachers and tutor groups have played a particularly important part in the pastoral care and support of some Pasifika students. It seems, for these Pasifika students, the tutor group and/or tutor teacher have been significant in them achieving success as Pasifika. Salē encapsulated the nature of the Pasifika tutor group stating: "In the PI tutor group you are treated like family, not as a student. You can have confidence to talk to your tutor teacher more as a friend, as someone to look up to".

Humour and fun were also mentioned as valued by students and parents. Hébert (2011) argues that gifted and talented students typically have a sophisticated sense of humour and those teachers who recognise and nurture this make a positive difference to students' lives. Fraser (2011) suggests that creative people will find humour in situations and things that others may find puzzling or mundane. Furthermore, a teacher who appreciates the humour of puns, paradoxes and unexpected events is more likely to have rapport with the creatively gifted student. The *Effective Teaching Profile* developed as part of the Te Kotahitanga project (Bishop et al., 2014; Bishop & Berryman, 2009) also included humour as a key feature. Students involved in the project mentioned that some teachers used humour as a way to try to build a bridge of understanding to them. Sometimes the humour did not work but they still appreciated the effort of the teachers. Powell (2011) considered that infusing humour into the classroom is an important

strategy for building relationships both from teacher to student and student to student.

In addition to the concept of whānaungatanga, the concept of manaakitanga was particularly displayed by teachers' encouragement of students. Manaakitanga is another of the five teacher competencies that are considered to enable Māori students to achieve education success as Māori (Ministry of Education, 2011). When teachers encourage students there is likely to be a positive impact on their achievement. All five of the teachers whose classroom practice received particularly positive comments from students evinced confidence in their students. These teachers seemed enthusiastic about the learning shown by these gifted and talented students. They displayed patience, giving students time to respond to questions and were sensitive to students whose answers to questions were in error or not in sufficient depth, affirming them for their efforts. They guided and facilitated students' learning by their encouraging demeanour. While it is true that teacher encouragement is important for all students, it could be argued that it is even more important for the gifted and talented. Gifted and talented students are more likely to be nonconforming than other students (Clark, 2008; Davis et al., 2011) and to have advanced interests and passions outside of the realm of experience of most of their peers and can therefore have a feeling of isolation (Davis et al., 2011). They may also value interactions with the adults in their lives more than they do the interactions with their peers (Clark, 2008; Ministry of Education, 2008b). These factors mean that teacher encouragement, may in general, be even more important for gifted and talented students than it is for their average peers.

From my interview data and classroom observations, it is evident that teacher expectations played a part in the achievement of some gifted and talented Māori and Pasifika students. In the example of Isaako, clearly articulated teacher expectations directly impacted on his effort and achievement. Although my observations were limited, from the interactions between students and teachers that I observed, teachers expected Māori and Pasifika students to achieve. For example, teachers were just as likely to ask Māori and Pasifika students to answer

a challenging question as any other student and there seemed to be no difference in the expected high-quality work standard based on ethnicity.

Nonetheless, the scope of this thesis is limited and it cannot be claimed that deficit views do not exist in either school, especially given the teachers who were observed were commended by students, nominated by heads of faculties, or volunteered to be observed. Deficit thinking has been a systemic problem within education systems throughout the western world. According to Ford (2010) it has affected all aspects of gifted and talented education – definitions, identification procedures, criteria, policies, curriculum, pedagogy, relationships and selection (or non-selection) for GATE programmes. Ford further explains the effects of deficit thinking on the American education scene:

Deficit thinking is grounded in the belief that culturally different students are genetically inferior to white students. It is believed that their culture – beliefs, values, language, practices, customs, traditions, and more – are substandard, abnormal, and unacceptable. When deficit thinking exists, educators are unable to focus on the strengths and potential of Hispanic and African American students; they are blinded instead by low expectations and stereotypes. (p. 32)

Like their American counterparts from minoritised cultures, many Māori students in New Zealand schools have had teachers' perceptions of their abilities affected by deficit thinking (Bishop et al., 2014). The same influence of deficit thinking could have affected perceptions of the abilities of Pasifika students. Deficit thinking is the root cause of low teacher expectations for students from the non-dominant cultural groups in society. Lowered expectations are one of the most constraining factors on Māori and Pasifika student achievement. Penetito (2010) argues that the general public in New Zealand view Māori education as a problem. Furthermore, Bevan-Brown (2010) states, "There are many teacher behaviours and practices that disadvantage gifted Māori students. Although these arise from a multitude of causes, low teacher expectation is at the foundation of many of them" (p. 64). The behaviours and practices influenced by low teacher expectations are wide ranging in nature. Teacher expectations have long been studied and despite some controversy, remain a vexing issue.

While several students spoke of the push to achieve from teachers, they were never questioned about why they thought there was this push. It seems likely that teachers' high expectations were connected to the placement of students in the one-band classes. In the United States, National Education Longitudinal Study (NELS) data on student tracking (streaming) was examined by Kelly and Carbonaro (2012). They found that the track label of a given class affected teacher expectations of students attending college "beyond student behaviour and academic performance" (p. 276). Furthermore, students' expectations of attending college were also affected by their tracks although not to the same extent as teachers' expectations. In contrast to the expectations for students in higher tracks, teachers had lower expectations for those in lower tracks. In New Zealand this has implications for Māori and Pasifika students who are likely to be under-represented in the top classes in schools where streaming occurs. Certainly this was the case in School A and School B (School A, 2006, 2007, 2008, 2009) where Māori and Pasifika students were under-represented in one-band classes although the 2009 data were significantly better than those of 2006.

### **Curriculum (Marautanga)**

The findings highlighted several principles of the curriculum that students and parents considered had contributed to their achievement. The most significant of these was the importance of receiving adequate challenge and linked to this, the need to have in-depth teaching. Furthermore, *The New Zealand Curriculum* (Ministry of Education, 2007c) asserts that students "should experience a curriculum that engages and challenges them" (p. 9). Challenge and depth can be provided through acceleration and enrichment. It is important to understand what is meant by acceleration and enrichment. For Townsend (2011, p. 255): "Acceleration refers to instruction that matches the readiness and needs of the gifted child more closely with the curriculum". Townsend (2011, p. 257) further posits: "Enrichment refers to learning activities that provide breadth and depth to regular instruction according to the abilities and needs of the child". Both acceleration and enrichment provide challenge for gifted and talented students.

A good example of a teacher providing challenge was a Year 11 English lesson on Shakespeare's *Richard III*. The focus of the lesson was on the imagery associated with Richard in two scenes whereby students were challenged to produce a written response which demonstrated an appreciation of the language used in the text. *Richard III* was a more advanced resource than would be used by a two-band class, and the content being studied was at a more sophisticated level. A short film clip was shown followed by a discussion of key aspects, and the meaning of the line, "The kingdom for a horse," discussed in some detail. In their responses the students were expected to explain their reasoning for why they thought the line had particular meaning. Initial responses lacked depth of understanding, but the teacher kept questioning until a student made a well-reasoned response that showed higher-order thinking. A more sophisticated level of reasoning was required than would be expected from a two-band class.

In contrast to the challenge provided by the teacher in this class, the findings outlined the case of Petera, who was capable of studying NCEA Level 1 te reo Māori in Year 9 but was not allowed to do this until Year 11. Petera's parents were concerned that he had not been provided with adequate challenge. Both in their view and mine, there should have been provision made for him to study at the level at which he was capable of achieving. Unless students are working in the "zone of proximal development", (Vygotsky, 1978) considers they are not likely to be receiving adequate challenge. It seems that Petera was not working in this zone in te reo Māori as he was, from his parents' account, working two years below the level at which he should have been working. Providing appropriately for him may have required the development of an Individual Education Plan (IEP). In outlining the case for acceleration Townsend (2011) argues that there should be "a flexible programme designed to closely match the challenge of the curriculum with the different and specific learning needs of gifted and talented children" (p. 252).

Acceleration, as an essential component of GATE programmes, needs to be evident across the whole curriculum. If we are to take cultural relevance seriously and enhance students' gifts, then acceleration in te reo Māori should be encouraged. This raises the questions of what counts as knowledge and whether a

Eurocentric curriculum stifles cultural gifts such as te reo. Is the study of *Richard III* a place for extension while te reo is ignored for dubious reasons? A Māori student with high ability in te reo deserves similar challenge to a budding Shakespearean scholar.

One way in which School A and B have deliberately been organised in order to provide more challenge for students is in the streaming (ability grouping or tracking) of students. It seems that the streaming of classes has the approval of the majority, if not almost all of the parents and students involved in this study. It is apparent to students and their parents that there are academic benefits to students being placed in classes that are relatively homogeneous in terms of academic ability. The reasons students gave for approving of streaming into a one-band class were: it helped their work standard, they were challenged by being amongst other high-ability students, there was a faster pace of work, there was less repetitive drill, the social relationships within the class were positive, and the one-band classes had better teachers.

The students' comments in this study about the advantages of streaming, with the possible exception of the comments about teacher quality, have generally been borne out by my own informal observations. The question of whether the one-band classes in School A and B really do have the best teachers is one that could be explored further. However, it is unlikely that school administrators or boards of trustees would admit to this, even if it was the case. Was Rawiri simply unlucky with the two-band teachers he had and lucky with the one-band teachers he had? It could possibly be that his experience of having better quality teachers in the one-band would be replicated by other students who move from two-band to one-band classes.

Rogers' (1998) evaluation of 13 meta-analyses on ability grouping (streaming) concluded that ability grouping was particularly beneficial for high-ability students. However, Hattie's (2009) evaluation of five meta-analyses of studies of ability grouping for gifted students found that while there are small academic benefits for students, at an average effect size of 0.3, these did not appear to be significant for most students. There were no reported negative social effects of

being ability grouped. Hattie commented that where students had specific curricula targeted at challenging them as well as being ability grouped, they were more likely to be engaged and successful. Simply following the same curriculum, but being taught in a group of higher ability, minimised the benefits of ability grouping.

A recent New Zealand study of 15 high schools in Christchurch found that “some positive consequences or specific advantages of between-class ability grouping [i.e. streaming] were reported for gifted and talented students and for those with special educational needs” (Hornby & Witte, 2014, p. 93). However, no advantage was found for Māori and Pasifika students, those with average ability or with English as a second language. Hornby and Witte argued that schools need to find more effective ways of ability grouping. What is not clear in the article is whether or not there were gifted and talented Māori and Pasifika students present, or, if there were any, whether these students found any advantage in streaming. In the American setting, McPherson (2010) posits that tracking has led to segregation in schools, with African American and Latino students under-represented in higher tracks and over-represented in lower tracks. She considers that tracking produces unequal access to the curriculum and therefore should be abolished.

Nonetheless, in both School A and B some gifted and talented Māori and Pasifika students and their parents spoke of the advantages of streaming. This should not be surprising, as Barlow (1991) outlined how in pre-European times, Māori built a special house for higher learning (Whare Wānanga) and students were “set apart for higher learning” (p. 159). It seems that streaming has in fact predated European arrival in New Zealand. In both schools, the benefits of streaming were maximised by the fact that at Year 9 and 10 levels there were different schemes of work for one-band classes. Gifted and talented students benefit by learning at an appropriate pace without unnecessary repetition. Teachers benefit by having more focused and enthusiastic students to teach.

While the findings provide some evidence that breadth was being added to some classroom programmes, there appeared to be little attention given to including contexts relevant to Māori and Pasifika students, resulting in classroom

programmes not having the breadth that would have indicated a culturally inclusive approach. However, no students expressed any desire for greater cultural relevance in the content of school programmes outside of those provided specifically related to their culture (e.g. te reo Māori). Several students commented that culture-related programmes were available for those who wished to study these and therefore may have considered this was adequate provision.

Nonetheless, Riley et al. (2004) outline the importance of ensuring that content and contexts are culturally relevant. In keeping with the suggestion of the Ministry of Education (2007c), School A and B both included the study of the Treaty of Waitangi within Year 9 or 10 social studies schemes of work. However, outside of this mandated study there did not appear to be much attention to Māori and Pasifika relevant contexts on a day-to-day basis. There is ample scope for incorporating culturally relevant contexts, for example, through metaphysical connections, as detailed by the English teacher reported in the findings. This approach incorporates a broad-based theme which can usefully be integrated to benefit gifted and talented students (Riley et al., 2004). This approach could provide ample opportunities to make metaphysical connections. As the Ministry of Education (2011) indicates, *ako*<sup>63</sup> is important to Māori achieving success as Māori. *Ako* implies teachers and students working in partnership in teaching and learning. Schools and teachers should therefore review the effectiveness of the curriculum and its delivery for Māori learners. The He Kakano and Te Kotahitanga projects, in which School A and B were involved, aimed to have Māori students achieving success as Māori. In the same way Pasifika students need to achieve success as Pasifika. This can only occur when the curriculum is made as relevant as possible to Māori and Pasifika and is delivered in a way that engages their interest. It seems both School A and School B have some way to go in this regard. When the curriculum is perceived as irrelevant and delivery methods are not suited to Māori and Pasifika learners, many gifted and talented Māori and Pasifika students will remain unidentified.

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<sup>63</sup> teaching and learning in the classroom and beyond

From the observations, when teachers used contexts for learning that were authentic and relevant to the students, and provided for their interests, they were engaged in the learning process. However, as an English teacher mentioned in the findings, relevant links can be made for Māori and Pasifika students without choosing particular texts, for example by looking for the “metaphysical connectedness” in texts. While this teacher apparently viewed providing opportunities and encouraging students to see “metaphysical connectedness” as not specifically providing Māori-relevant contexts for learning, arguably she was in fact doing this. Any opportunity to make links with students’ own lives and interests or the important principles of their culture is providing a relevant context for their learning. As well as adding breadth to curriculum delivery it is showing sociocultural awareness.

### **Implementation (Whakahāngai)**

The findings confirmed Rawiri’s comments in relation to teacher planning assisting him to achieve. In addition to the macro-level planning he discussed, well-planned, day-to-day lessons can also impact positively on student achievement. Bishop et al. (2007) discussed the importance of lessons being structured and well planned as part of the Māori concept of nga whakapiringatanga. Bishop et al. (2007,) note: “Whakapiringatanga involves specific individual roles and responsibilities that are required in order to achieve individual and group outcomes” (p. 161). Being well planned is the teacher’s role and this is an important part of teachers being proactive in enabling students to learn effectively. However, planning is about much more than simply the individual teacher planning effectively. It is also about the school planning deliberately and purposefully to meet the needs of gifted and talented students in general and Māori and Pasifika students in particular. To neglect such planning is for the school to fail to meet its obligations to these students and to continue the unacceptable under-representation of Māori and Pasifika students in programmes for the gifted and talented.

As seen in the findings, four of the students and a parent commented on the assistance received from teachers who made themselves available to provide extra

tuition outside of regular classroom hours. From their accounts, the provision of this extra tuition has been significant for them. The teachers who made themselves available day after day, in their own time to assist students were unselfishly demonstrating sensitivity, support and respect to students, trusting the students to do their best to apply the advice and help they had been given. Bensman (2000) and de Jesus (2003) believe that a caring and culturally-responsive teacher is not limited in his/her care for students by the parameters of the school's day or its organisation, but takes responsibility for students outside of these confines. Teachers such as these are acting in harmony with the Māori concept of manaakitanga enabling Māori to achieve success as Māori, and Pasifika to achieve success as Pasifika.

The findings highlighted the significance of students having their interests provided for within the school. These interests included the performance aspects of their cultures. As mentioned in the findings, Māori and Pasifika students were involved in a range of activities that enabled them to identify with and celebrate their cultural roots. These included, kapa haka, pōwhiri, learning te reo Māori, the Māori and Pasifika Students' Awards evening (in School A), Pasifika cultural performances and learning the Samoan language (in School B). These activities were important to students' understanding of their identities. Webber (2008) outlined the importance of students discovering their racial-ethnic identity, particularly for the many students of mixed Māori and Pākehā descent. She argued that schools play a crucial role in developing a student's ethnic identity. The influence of Schools A and B in developing a sense of racial-ethnic identity and sociocultural awareness appeared to be significant for the students involved in this study.

One study found that teachers in mainstream secondary schools in New Zealand considered that being involved in kapa haka had numerous benefits for students. Among these benefits were improved identity, self-esteem and confidence. Kapa haka was also linked to an improved attitude and work ethic and raised achievement levels (Whitinui, 2010). Kapa Haka may have been a factor in the development of a strong sense of personal identity and high achievement for some of the students who participated in this study. Certainly, several Māori students

spoke of their involvement in kapa haka with pride and a few Pasifika students also spoke with pride about their involvement in the performance aspects of their cultures.

### **A place to stand (Tūrangawaewae)**

As outlined in the findings, mentoring or coaching of students has taken on various forms with comments indicating some success from the interactions between mentors/coaches and students in terms of their pastoral care. Kerr and Cohn (2001) reason that a positive relationship between a gifted student and a mentor is vital to the development of the student's talent. Moreover, mentoring is viewed by Santrock (2012) as a means of assisting adolescents to develop a sense of purpose. Mentoring could be a way for schools to contribute to the general school student body in terms of finding a place to stand. Ruf (Shaughnessy & Ruf, 2015) considers mentoring as not only important for the healthy development of the gifted and talented, but also for people of all levels of ability. However, Clasen and Clasen (2003) say not all gifted and talented students need to be mentored, but mentorships should be made available to students who have demonstrated task commitment and creativity, particularly if school programmes are unable to meet their needs. They conclude, "Whether the mentorship focuses on advancing super talent or nurturing promising potential, a mentorship may mean the difference between a dream withered and a dream realized" (p. 265).

One of the most illustrious examples of effective mentoring is Sir Ernest Rutherford. His mentor, Joseph John Thompson received the Nobel Prize as did Rutherford and Thompson's son, George Paget Thompson. From there, 11 of Rutherford's students and team members were also awarded the Nobel Prize (Grassinger, Porath & Ziegler, 2010). It is significant that Presidential Scholars too, have had mentors assisting them in their fields of passion and expertise (Kerr & Cohn, 2001). Many of them acknowledge the important influence of their mentors on their achievements.

However, the previously stated benefits of mentoring do not appear to be confirmed by Hattie's (2009) synthesis of two meta-analyses. He found an

average effect size for mentoring of 0.15, the 120<sup>th</sup> ranked influence of 138 influences on student achievement. Hattie's synthesis does not discuss how mentors were matched up with those they mentored. If the mentor-mentee relationship is made on the basis of similar ability or similar interests there are some potential problems. While connecting people of similar ability or with comparable interests may be important, there are other factors to be considered such as matching compatible personality types, values and beliefs.

School A used the term 'mentoring' for what Hattie terms a peer tutoring programme, as well as for other student support relationships. Hattie (2009) acknowledges that: "Mentoring is a form of peer tutoring" (p. 187), but synthesises the data on peer tutoring separately from the data on mentoring. According to Hattie (2009) "Mentoring usually involves little if any teaching and is more of an 'apprentice' model based on social and role model experiences" (p. 187). Interestingly, although he does not classify this as mentoring, Hattie (2009) found peer tutoring was effective in improving student achievement with an average effect size of 0.55 across 14 meta-analyses. This was particularly effective when the one being tutored set his/her own goals. It seems the lines between what defines mentoring and what defines peer tutoring are somewhat blurred. What Hattie's (2009) research does not reveal is what effect results when a mentoring relationship is valued and cultivated by both the mentor and the one being mentored as opposed to what effect there is when one participant or both participants are not fully committed to nurturing and valuing the relationship.

Grassinger et al. (2010) concur with Hattie's conclusion from the meta-analyses of mentoring that the effect size is low to moderate. However they question the validity of the data and argue that "meta-analyses paint a strongly distorted picture and markedly underestimate the possible effects" (p. 31). Grassinger et al. argue very few mentoring programmes meet the methodological, conceptual and theoretical requirements for inclusion in a meta-analysis. Furthermore, meta-analyses do not differentiate between effects of variables targeted by the programme and those that were not its focus. Moreover, no account is taken of whether the criteria for successful mentoring programmes have been met in terms, for example, of appropriate training and assessment of the suitability of mentors,

careful matching of mentors and mentees, suitable duration, actions taken to build the relationship, and monitoring and supervision.

The hui discussed in the findings are examples of short-term mentoring programmes that were received very positively by the boys who participated. They were first conceived by Māori teachers with the programmes developed in consultation with kaumatua. The purposes of the hui were to stress the importance of culture and identity and their associated emotional and intellectual dimensions as well as to equip students to succeed, lead and develop their aspirations. The hui were examples of consultation with Māori and working in partnership to identify and foster gifted and talented Māori students in developing their abilities and aspirations. The hui and other mentoring programmes were important facets of pastoral care and played a part in providing students with a place to stand. However, with regard to the hui, the comments made by some teachers, that there was not sufficient follow-up, need consideration. It is likely there would have been greater benefit had there been some follow-up mentoring of the boys involved. This does not discount the comments made by some of the boys and their parents that the hui had a major positive impact on their lives. With follow-up, an even more significant impact could have been made. To gain the maximum possible benefits from events such as the hui, in future the building of strong school-whānau networks will be very important.

One way to build stronger school-whānau networks mentioned by Tiare, could be for the school to build a marae. Lee (2012) asserts that “marae a-kura<sup>64</sup> provide a context not only to teach Māori, but to learn as Māori” (p. 3). Given that *Ka Hikitia – Accelerating success: The Māori education strategy 2013-2017* (Ministry of Education, 2013) places importance on Māori achieving as Māori, building a marae could assist this process. Indeed the Ministry of Education (2000) views it as one way to improve schools’ engagement with Māori whānau and communities.

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<sup>64</sup> School marae

Schools will need to take seriously the need to build strong partnerships with whānau, hapū, iwi and churches if the issues related to support and differentiation for gifted and talented Māori and Pasifika students are to be effectively addressed. Both the *Pasifika education plan 2013-2017* and *Ka Hikitia* (Ministry of Education, 2013) emphasise the importance of home and school partnerships in realising the laudable goals of the plans. *Ka Hikitia* (Ministry of Education, 2013) clearly outlines the importance of productive partnerships and their links to effective teaching: “Māori students’ learning is strengthened when education professionals include a role for parents and whānau, hapū, iwi, and Māori organisations and communities in curriculum, teaching and learning” (p.23). Indeed, research on the He Kakano project (Averill et al., 2014) concluded: “Good communication between teachers, whānau, and students that accommodates diverse perspectives, desires, and needs is important for Māori students to be able to achieve as Māori” (p. 33). Pohio (2014) asserts that “a school culture or kaupapa where communication between families, students, and school is viewed as ‘just the way we do things around here’ should be a goal all schools aim towards” (p. 242). It seems that schools will more readily be able to provide students with a place to stand (tūrangawaewae) when such a culture exists.

The Education Review Office (2010) report *Promoting success for Māori students: Schools’ progress* found that while some schools had developed effective partnerships with whānau, “more schools need to improve relationships with whānau so that home and school can work in partnership to improve learning” (p. 30). It seems that in many mainstream secondary schools, there is untapped potential for harnessing the synergy of Māori and Pasifika whānau and school working together. For this to happen, Pohio (2014) emphasises the importance of having a clear purpose that is shared by all stakeholders. Furthermore, she argues that: “Without deliberate attention to barriers at the planning stage, schools risk making deficit focused assumptions about family members without considering ways to develop programmes that can draw from their strengths” (p. 245). The rich and diverse stories of academically successful Māori and Pasifika secondary school boys require wider research. New Zealand can no longer afford to neglect the power that Māori and Pasifika whānau and schools working in partnership can

have in making a positive difference to the learning of the many unidentified gifted and talented Māori and Pasifika students in our secondary schools.

### **Summary (Whakarāpopoto)**

From the interview data, teacher questionnaires and classroom observations it is apparent that features of relationship building, the principles of the curriculum, its implementation and the provision of a place to stand, all impact on the identification and nurture of student talent and their subsequent achievement. The learning that has taken place through the school communities of the students in this study is linked to the sociocultural practices of the schools. All four facets of the Mangō Pare Model were evident in the pedagogy of effective teachers. Of all the facets of the model identified by gifted and talented Māori and Pasifika students as contributing to their achievement, the two which appeared to have the greatest significance were the importance of effective pastoral care with its strong relational focus, and the need for classroom programmes to provide adequate challenge. When classroom teachers and other school staff convey to students that they care about them as culturally-located human beings, students are set up to make the most of the curriculum and the skills taught. When the programme provides challenge and opportunities for talent to be nurtured, gifted and talented students grow both in their academic and personal lives. When schools deliberately build partnerships with Māori and Pasifika whānau a synergy develops that enhances student learning. Classroom teachers, other staff members and schools do make a difference to student achievement. They are important environmental catalysts facilitating the identification and nurture of students' gifts into talents.

## **Chapter Eight: Summary of Findings, Limitations and Conclusion**

This chapter summarises the findings of this research project, as reported and analysed in chapters five to seven, and addresses the limitations of the research. It then proceeds to explore a series of concluding points relating to the identification and nurturing of academic abilities amongst a cohort of gifted and talented Māori and Pasifika secondary school boys synthesised in this study.

### **Summary**

The findings were viewed through the lens of sociocultural learning theory (Barker, 2008; Scott & Palincsar, 2009) to examine the elements that have contributed to the nurturing of talent, demonstrated by the academic success of gifted and talented male students. These perceptions were primarily drawn from the narratives of the students themselves, parents, an uncle, a kaumatua, an iwi representative on a school board of trustees, and school teaching staff. Data were also gathered from questionnaires and classroom observations. Analysis of the data led to three main categories of findings which are: the influence of parents and other whānau, intrapersonal characteristics, and the influence of teachers and schools. It is proposed that the success of the students can be attributed to the complex interplay of home and school environmental influences, and intrapersonal characteristics. These operate within the sociocultural settings of the gifted and talented Māori and Pasifika students' whānau and the schools attended, as well as their wider social interactions.

### **The influence of parents and other whānau**

The importance of the family in contributing to student achievement is well documented in the literature (e.g., Biddulph et al., 2003; Freeman, 2000; Henderson & Berla, 1994; Macfarlane et al., 2014). This was also apparent in stories relayed by students involved in this study. From the accounts of students and parents there were four key positive influences on student achievement emanating from their homes.

The first influence was the value placed on education which included prioritising education and the resulting modelling of achievement. From the accounts of students and their parents, education was prized in most students' homes. In all examples where education was valued, there was evidence of an individual within the whānau placing a high value on education, which in turn influenced others in the whānau. There were various ways in which the importance of education to the family was conveyed. The research showed that modelling of parents and other whānau was particularly pertinent to some of the boys, and from the boys and parents' reports it was apparent that these whānau were very keen for the boys to take advantage of their educational opportunities.

The parents' expectation that their sons would achieve highly was the second major influence of whānau. This was demonstrated through motivational talks and assistance given with academic work. Not only were parents and other whānau role models and motivators, but they put in the time and effort to provide practical assistance when it was needed.

The third significant whānau influence was that it appeared almost all students were raised in nurturing homes where they were loved unconditionally, and for some students, the religious beliefs and/or values of the family were imparted.

The religious beliefs of the family appeared to be of particular significance to most Pasifika students, and integral to the way they viewed their world as well as contributing to their success. Part of the nurture for some students was parents using informal opportunities to teach.

Finally, several students considered that their abilities were at least in part the result of natural endowment. For three of them, it seemed this was the primary element involved in their success.

Positive whānau relationships and a commitment to care for the educational well-being of the boys were important to the boys' achievement. In the boys' view generally, the influence of family was the element that most contributed to their academic success at school. The students' homes were significant sociocultural settings that for the most part facilitated their success at school. Freeman (2000)

posits that parents make the critical difference in the achievement of individuals who begin their lives with similar potential ability. She believes: “Parents have to be both willing and able to take advantage of the opportunities that exist around them” (p. 582). For parents of at least 22 of the boys in this study, an awareness of the opportunities that were available to their sons and a commitment to encourage them to take advantage of opportunities was present. At times the family was innovative in supplementing the provision of the school for their sons’ learning needs. Interestingly, while the home environment featured as important for the two students reported to have experienced personal trauma, they gave greater emphasis to their own intrapersonal qualities.

### **Intrapersonal characteristics**

Intrapersonal characteristics are identified in the literature as contributing to students’ academic success (e.g., Assouline et al., 2006; Gagné, 2010; Hogan, 2009). In this study, there were four main intrapersonal characteristics that students reported had contributed to their academic success. These were: a strong work ethic, determination, perseverance and personal identity. They were particularly evident in numerous stories told by students, parents and an uncle. One way determination was demonstrated was through self-motivation. Goal setting was a motivational strategy that several students considered had contributed to academic success for them at school. It seemed that the motivational strategy of goal setting worked in conjunction with the volitional qualities of a strong work ethic, determination and perseverance. For some, a key goal was to counter the stereotyping of Pasifika or Māori boys as not being successful in academic pursuits. Some were very aware of the deficit thinking associated with negative stereotyping and wanted to be role models for other students.

The aspect of personal identity that appeared most significant for students was their racial-ethnic identity in relation to their ability to be effective “cultural straddlers” (Carter, 2006, p. 304). Several students appeared to value their identities as Māori and/or Pasifika as well as that of successful academic students. For some students, an aspect of their identity was altruism, which was

demonstrated through a strong service orientation. These students showed empathy towards others and chose to become involved in co-curricular service opportunities offered by the school. They exemplified the recognition Māori in Bevan-Brown's study (2011a) ascribed to service to others as a primary indicator of giftedness. Self-belief or self-confidence was also an aspect of identity that some boys linked to their academic success. The very fact that students were able to identify and explain specific examples of intrapersonal characteristics that had contributed to their academic success suggests they had the understanding of self that Gardner (1999) equates with intrapersonal intelligence. Such understanding of self enables gifted and talented individuals to develop mental models of themselves and to use these models in decision making.

### **The influence of teachers and schools**

The literature recognises that teachers and schools influence student achievement through their pedagogy and curriculum (e.g., Ford, 2011; Macfarlane et al., 2014; Vialle & Tischler, 2009). In addition to whānau, teachers and schools were recognised in this study as critical elements important to identifying and nurturing student talent as well as contributory elements in student achievement. Thirteen of the 30 students mentioned this as did five of the 14 parents or other adult whānau members. The responses of participants have been organised under the Mangō Pare Model. The model has four interconnecting strands: relationships, the curriculum, implementation and a place to stand. The mangō pare is not inert but moves through the currents of te ao Māori (the Māori world) and the Pasifika world. Each of the four strands is important to empowering Māori and Pasifika learners to achieve academic success.

Relationships are the head of the mangō pare. It has been argued that in order for Māori and Pasifika students to flourish in terms of academic achievement it is important that they feel cared for and valued as culturally-located beings (Bishop & Berryman, 2006; Ministry of Education, 2012c). From the comments of students and my observations in classrooms it was apparent that some teachers had a strong focus on building positive relationships with students. In addition to commenting on the relationship focus of classroom teachers a few Pasifika boys

commented on how they valued the care they received from their tutor teachers and from a deputy headmaster. Two Pasifika students and two teachers spoke of the way mentoring programmes had assisted students to achieve.

In contrast to the care that was received by the above-mentioned Pasifika boys, two boys outlined conflict they had with deans. Given the questioning nature of many gifted students as outlined in the literature (e.g., Assouline & Colangelo, 2006; Betts & Neihart, 2004; Silverman, 1993b), and their tendency to stand up to authority, it is perhaps surprising that there were not more instances of this.

The use of humour and fun in classroom programmes, the encouragement teachers provided to students to achieve, and the expectations of teachers that they would achieve, were all said to play a part in students' academic success. They were part of an ethic of care (*manaakitanga*) for students (Bishop et al., 2014; Macfarlane et al., 2014; Noddings, 2005) that impacted on their learning.

The principles of the curriculum form the backbone of the *mangō pare*. The importance of receiving adequate challenge commensurate with students' abilities was the most frequently mentioned curriculum principle, identified by 12 students and two parents. Several students expressed their appreciation for being able to work in a school environment where classes were streamed. They considered that being placed in classes with others of similar ability meant that they received more challenge than they would in a heterogeneous classroom environment. Acceleration in the pace of learning was a feature of School A with approximately 120 students starting NCEA Level 1 qualifications early each year.

The issue of streaming (also known as tracking or ability grouping), used in both School A and B, has been the subject of debate both in New Zealand and overseas. There seems little doubt that streaming advantages those in the one-band in terms of their learning. The major issue that needs further study is what impact it may have on students not placed in the one-band.

The pastoral care shown through mentoring programmes appeared to help students to develop their aspirations and find a place to stand (*tūrangawaewae*).

For some Pasifika students, in both schools, the tutor teacher had a significant mentoring role. Some senior Māori and Pasifika students also spoke of the mentoring role older students had with younger students. There was also a specific mentoring group of four Year 10 Pasifika students with a teacher-mentor in School A that impacted on student aspirations and contributed to providing them with a place to stand. Significant mentoring events for gifted and talented Year 9 and 10 Māori students were the three hui held as part of the EHSAS project described earlier. The communal nature of the hui provided the opportunity for whānaungatanga and kotahitanga to develop and be expressed amongst all those who were involved. As with the mentoring initiatives provided for Pasifika students, the hui seemed to provide Māori students with the opportunity to find a place to stand (tūrangawaewae).

When students and their whānau find the school provides them with a place to stand (tūrangawaewae) - a place they can feel at home - it is likely to have a beneficial effect on student identity and achievement. Certainly, the importance of this was recognised in Macfarlane et al.'s (2014) study where the first recommendation for teachers and schools was that they: "Value Māori students' cultural distinctiveness and support them to develop a degree of academic and cultural self-confidence and self-belief" (p. 182). Furthermore, the *Pasifika education plan 2013-2017* (Ministry of Education, 2012c) states: "Pasifika success will be characterised by demanding, vibrant, dynamic, successful Pasifika learners, secure and confident in their identities, languages and cultures through all curriculum areas" (p. 2).

It is not surprising that whānau was very significant in supporting the boys' success at school, given that the literature consistently shows the importance of family to student achievement (e.g., Biddulph et al., 2003; Freeman, 2000; Macfarlane et al., 2014). The support of whānau in this study contrasts with a common perception that Māori and Pasifika parents don't care much about their children's achievement at school. Indeed, Bishop et al. (2014) found that many teachers linked low Māori student achievement in part to poor parent support. Given that many Māori and Pasifika parents and other whānau work diligently fostering their children's achievement, their efforts should be acknowledged,

valued and communicated to others. When schools build trusting partnerships with whānau of Māori and Pasifika students it reinforces that their contributions are valued.

### **Limitations of the research**

This study has collected important data addressing serious concerns in the New Zealand education system and has produced some significant findings. However, there are a number of limitations. These include: the mismatch between the ethnic and cultural background of myself as the researcher and the participants in the study, the uniqueness of the two schools and the students involved in the research, the change in the focus of the thesis that occurred following the collection of the data, the grouping of Māori and Pasifika students together for the research, the focus on academic issues, and the pre-existing relationship between the researcher and some of the students. An explanation of each limitation follows.

### **Cultural mismatch**

Given my Pākehā ethnicity there are some challenges and disadvantages in researching issues related to Māori and Pasifika student achievement. According to Bishop (2005a) “Researchers in Aotearoa/New Zealand have developed a tradition of research that has perpetuated colonial power imbalances, thereby undervaluing and belittling Māori knowledge and processes in order to enhance those of the colonizers and adherents of colonial paradigms” (p. 110). This means that there is a history of Māori and Pasifika understandings, knowledge and experiences being misrepresented and/or denigrated and there is the risk of the researcher unintentionally continuing this tradition. There is also the risk that the research may serve to advance the interests of the researcher more than the Māori and Pasifika peoples being researched. To minimise the limitations of my cultural positioning I sought the advice of Māori and Pasifika educators, a kaumatua and an iwi representative on a board of trustees prior to undertaking the research as well as at different points during the research process. An example of this was when the Mangō Pare model was submitted to the Head of Māori Studies and Dean of Māori Students as well as two Pasifika teachers, with their advice for changes actioned prior to the model being included in the thesis. I endeavoured to

engage participants in interviews by having an open-ended approach and encouraging conversations about topics of interest both to participants and myself. This is reflected by the fact that it was the comments made by participants in the early part of data gathering that changed the focus of the research. I consider that this discursive approach to interviews is congruent with participatory co-construction as outlined by Bishop (2005a). Bishop (2005a) elaborates: “The researcher cannot ‘position’ himself or herself or ‘empower’ the other. Instead, through entering a participatory mode of consciousness, the individual agent of the ‘I’ of the researcher is released in order to enter a consciousness larger than the self” (p. 120). This is relevant to my research because the dialogue on several occasions went beyond the expected parameters of the research and the “participatory mode of consciousness” enabled a wide range of issues to be raised. My thesis seeks to honour the participatory nature of the discursive approach by placing value upon the unanticipated direction in which the participants took the research and seeking to authentically retell their stories. The employment of a narrative methodology further supported this intent.

### **The uniqueness of the two schools and the students involved in the research**

The two schools involved in the study were both boys’ secondary schools. However, they had juxtaposing ethnic and socio-economic profiles. At the time of this study School A was a decile 8 school with approximately 14 per cent of students identifying as Māori and four per cent Pasifika and School B was a decile 2 school with approximately 55 per cent identifying as Māori and approximately 17 per cent as Pasifika. These contrasting schools were unique and the very different demographics provided a rich diversity of data. Within each school there was a wide diversity of home circumstances amongst the students who were interviewed. Each student who was interviewed told his own story of what had contributed to his success and each parent or adult whānau member gave his or her own perspective on what had facilitated each boy’s achievement. While the research findings may be of relevance to Māori and Pasifika students in other schools, the uniqueness of the participating schools and individuals needs to be considered. If data were to be gathered in other schools in response to the same research questions, the findings may be different. The findings therefore may

inform other contexts, but they cannot necessarily be generalised to other contexts. It is interesting to note however, the ways in which the findings resonate with a number of other related studies as already outlined.

### **The change in the focus of the thesis**

At the outset of the research project, the focus was on the EHSAS project and how it contributed to the identification of gifted and talented Māori and Pasifika boys and provided support for them. However, in the course of conducting two of the early interviews with students, they spoke about significant factors linked to their achievement that had no connection to the EHSAS project. (The project was also terminated, as the result of a change of government, before it had run its full course.) I then began to ask every student and adult whānau member what they considered had contributed to each student's academic success. Even so, I never envisaged at this stage that this would become the focus of the thesis and thought it would be an adjunct to the main arguments which would focus on the EHSAS project. Arguably, if the study had started with this focus on student success then more data could have been systematically collected. Nonetheless, the shift in the direction of the study provides data about an area of real need in this country. With Māori and Pasifika secondary school boys seriously under-represented in programmes for the gifted and talented (Keen, 2004; Riley et al., 2004), and being the lowest achieving cohorts in the NCEA examinations (New Zealand Qualifications Authority, 2014a, 2014b), it is important that the stories of successful students are told.

### **The grouping of Māori and Pasifika students together for the research**

It is acknowledged that there are particular issues facing Māori as the tangata whenua that are not shared by Pasifika peoples in New Zealand. Primary amongst these issues is the history in New Zealand since 1840 of nonMāori researchers whom Bishop (2005a) states, have “misrepresented Māori understandings and ways of knowing” (p. 111). In addition, to place all Pasifika peoples together may be seen as assuming an homogeneity amongst them and a failure to recognise the differences between the distinct peoples (e.g., Cook Islands Māori, Samoan, Tongan, and Fijian). Furthermore, to have differentiated the Māori students by iwi

and hapū affiliation may have yielded interesting data. However, the decision was made to research Māori and Pasifika students as a group because both of them were seriously under-represented in programmes for the gifted and talented. In this way the issues that were similar for both groups would be brought to the fore. Further research to differentiate between the various Pasifika peoples, and Māori iwi and hapū, would be useful and would add depth of understanding to diversity across these groups.

### **Academic issues**

All the boys who were part of this study either began their secondary schooling as one-band students or became one-band students during the time they were attending high school. While this study investigates the reasons for their success and yields some significant findings, it does not examine the stories of perhaps equally gifted and talented Māori and Pasifika students who were not placed in one-band classes. Arguably, a more balanced study of gifted and talented Māori and Pasifika students would have included those who had been identified by other measures as gifted and talented. For example, the three Māori boys placed in two-band classes who tested at the 99<sup>th</sup> percentile or higher on Raven's Progressive Matrices, were not included in this study. It may have been enlightening to have interviewed them and their whānau. However, in limiting the study to boys who had achieved highly, the thesis has kept its focus on the stories of academically successful students. The underachievement of other gifted and talented Māori and Pasifika students would be worthy of a separate study. To have included these students within this study may have diminished both the stories of those who have been successful and the insights of those who have underachieved.

It is acknowledged that giftedness and talent is multifaceted and goes far beyond the realm of the academic. A much more holistic view of giftedness could have been studied by also including other domains such as sporting, cultural, affective and spiritual. Two Māori and one Pasifika teacher commented that they considered the academic focus of the EHSAS project, from which this study had its genesis, was too narrow and that the inclusion of the cultural domain would have included more boys with consequent benefits to the schools. They would,

however, not have included sports as students with abilities in these fields were already identified and provided for well. However, the EHSAS contract with the Ministry of Education was specifically focused on the academic domain and because the research was intended to focus on the project, giftedness outside of the academic field was not researched. Moreover, by focusing on the academic achievement of a cohort of Māori and Pasifika secondary school boys this study could be viewed as running counter to the more holistic view of giftedness and talent characteristic of Māori and Pasifika cultures. To view giftedness and talent largely through the lens of academic success is a Eurocentric construct. The two schools involved in this study are both state boys' secondary schools. New Zealand boys' secondary schools have inherited their strong emphasis on academic success from the English public boys' secondary school tradition. State boys' secondary schools in New Zealand place high status on academic achievement as evidenced by New Zealand's premier secondary school examination, the New Zealand Scholarship results from 2009 to 2013 (Macleans College, 2014). The top school in the country was Wellington College (a boys' school), and three other state boys' schools featured in the top 10.

The status gained from ranking lists of school scholarship results supplied to the news media means that a shift to a more holistic view of giftedness and talent will not be easy to accomplish. While a shift to a more holistic view is desirable, it is difficult to foresee the day when, for example, a student who is outstanding in manaakitanga will be accorded similar recognition to an outstanding academic achiever or a brilliant sportsperson yet such acknowledgement deserves attention. Such students could become ambassadors for peace and reconciliation which is an area where modern society is sorely lacking. What this study does provide is an insight into what has led to the success of Māori and Pasifika secondary school boys in two state boys' secondary schools. This is likely to be of value to stakeholders in schools of this type, and perhaps may be extrapolated to benefit schools more generally.

### **The methodology**

Narrative involves the reconstruction of experience. In this study it was evident this was occurring through both individual and focus group interviews. While narrative inquiry was deemed the best methodological framework for most of the data gathering in this study, there were some limitations in this approach. A key possible limitation that Chase (2005) identifies is that of how power operates within the relationship. As a teacher and leader of GATE in one of the schools, both students and parents would have viewed me as being in a position of authority. This could have impacted on the narrative that developed through the interviews. What participants knew or perceived of me as a teacher could to some degree have influenced their responses. A second possible limitation is the need for me to accurately interpret and represent the voices of participants. In my case, being from a different cultural background to the participants, there could have been some difficulty in accessing their narratives and understanding the meanings they gave to experiences. Moreover, interviews do not have the anonymity of questionnaires at the data gathering phase so this could have meant that responses were more guarded than they would have been with questionnaires. Furthermore, individuals' responses may have been influenced by differences between interviewees and myself in terms of personality and social class. The limitations implicit in a narrative inquiry methodology utilised by a cultural outsider have in part been minimised by triangulating data through the use of questionnaires and classroom observations.

### **The pre-existing relationship between the researcher and some of the students**

A possible limitation of this study is that 18 of the students and several of their parents were known to me prior to undertaking the study as I was GATE director in the school in which the students were involved. This could possibly have affected the gathering of data. Given that I had no negative associations with any of the students prior to or during the data-gathering process, there may have been a reluctance to criticise the school with a resultant over-emphasis of the school's strengths. It was interesting to note that while students in both schools named the teachers that had made a positive difference to their learning, with one exception, they did not name the teachers about whom they were critical. Although they had

been assured in both the written documentation and in person of the confidentiality of all data, there may have been a fear in my school that to have criticised and identified a particular teacher may have been a criticism of a friend or colleague of mine. Nonetheless, it seems that several students at least, understood that honest feedback was being sought, as they offered criticisms of teachers (albeit un-named) and/or the school.

### **Conclusion**

This study examined the stories of academically successful Māori and Pasifika secondary school boys in order to gain some insight into the reasons for their success. The two research questions that guided the research process were: “What are the most significant elements contributing to the success of academically gifted and talented Māori and Pasifika secondary school boys?” and, “How effective have schools and teachers been in meeting the needs of gifted and talented Māori and Pasifika secondary school boys?”

For the students involved in this study, the influence of whānau appeared to be the most significant element contributing to the academic success of the group as a whole. The paramount component of the whānau’s contribution was the extent to which education was valued, often demonstrated through role modelling. Other important ways in which the whānau contributed were the expectation to achieve, the nurturing environment of the home, and natural endowment. When all of these components interconnected the students were likely to excel.

For many of the students, their own intrapersonal characteristics were the second element they and their whānau identified as being integral to academic success. The primary intrapersonal trait linked to high achievement was a strong work ethic. Other volitional qualities connected to a strong work ethic were determination and perseverance. For some students, it seemed having a clear sense of personal identity was important. Particularly pertinent was the ability to be a cultural straddler (Carter, 2006), showing the adaptability to identify with their

racial-ethnic heritage and to identify with high academic achievers. When students recognised the importance of their own intrapersonal characteristics in their success, they demonstrated the ability to take responsibility for their own learning.

About half of the students and whānau identified teachers and schools as important contributory elements in academic success. Crucial to the contribution teachers made was the ability to build positive teacher-student relationships. However, relationships alone were not enough to provide for students' learning needs. They needed to work in conjunction with a curriculum that had adequate challenge, where teachers made themselves available to assist students with learning outside of regular classroom hours, and where students were provided with support to find a place to stand (tūrangawaewae) in the school. When teachers and schools had these criteria as their focuses, students expressed appreciation for the difference they had made to their learning.

The importance of whānau, and teachers and schools, has been emphasised in other New Zealand studies (e.g. Ballam, 2013; Bishop et al., 2014; Macfarlane et al., 2014) as well as this study. These contributing elements are important to success, although this study elevates the intrapersonal qualities of the students themselves to a place where, for some students, they are at least as significant as the contributions of whānau, teachers and schools.

### **Implications of the research**

The findings from my study, outlined in previous chapters, have several implications for educators, policy makers and researchers. The major focus here is on schools and teachers although the implications for individual students and their families are also addressed.

### ***Under-representation of Māori and Pasifika students in programmes for the gifted and talented***

The data gathered from School A and School B found that under-representation of Māori and Pasifika students in programmes for the gifted and talented was evident in both schools. During the course of the EHSAS project and my data gathering, the percentage of Māori and Pasifika students involved in GATE programmes began to increase although it was not equivalent to the proportion of their New Zealand European peers. Keen's (2004) research in three regions of New Zealand found that, based on their population, Māori and Pasifika students were under-represented in programmes for the gifted and talented. Māori students were 56 per cent as likely and Pasifika students were 48 per cent as likely as New Zealand Europeans to be identified for programmes for the gifted and talented.

To address the disparity that continued to exist in School A and B throughout the study, and in most schools in New Zealand, the Ministry of Education and schools ought to consider to what extent their policies and practices help or hinder the effective identification of, and provision for gifted and talented Māori and Pasifika students. For example, policies and practices ought to give recognition to the cultural, spiritual and service aspects of giftedness and talent as well as to academic abilities. Policies and practices should enable gifted and talented Māori and Pasifika students to be represented in programmes for the gifted and talented in the proportions that their population would suggest ought to be the case.

Implicit in both the Koru Toru and Mangō Pare models are possible ways to address the under-representation of Māori and Pasifika secondary school boys in programmes for the gifted and talented. Both models are embedded in empirical research and therefore could be useful for the professional development of teachers. The Koru Toru Model illustrates how the home, school and the student's own intrapersonal qualities can play a significant role in student achievement. Although the home or school, or home-and-school partnership can be targeted to improve the representation of Māori and Pasifika boys in programmes for the gifted and talented, it is important not to embrace the idea that this will be sufficient. This simplistic notion fails to take into account the important third key, the student's own intrapersonal characteristics. For each student, the relative

importance of the three keys will vary. It seems that the student's own intrapersonal qualities are developed through their life experiences and that schools can aim to deliberately foster these qualities through specifically targeted programmes.

The Mangō Pare Model graphically represents major issues for schools in making effective provision for the nurturing of the talents of gifted and talented Māori and Pasifika secondary school boys. The pre-eminent place of teacher-student relationships (whānaungatanga) should be recognised. Implicit in the term 'relationships' is an inextricable connectedness between the individuals involved and the creation of spaces for dialogue to occur. Cross-cultural teacher-student relationships are most likely to flourish when diverse ways of knowing are valued and when the culture of the student is central to the relationship. It is clear from this study that relationships mattered to the boys involved in this study. The relationships they valued were described as "caring," "building that student-teacher bond," "trustworthy," "a friend," and "high teacher expectations." It appears that for these boys there was little or no distinction between caring for them academically and caring for them emotionally. The building of positive relationships between students, whānau and teachers, needs to be at the centre of the policies and practices of schools, and as this research demonstrates, the links between relationships and learning are especially important for Māori and Pasifika (Bishop et al., 2014; Fletcher et al., 2009). When teachers and schools ensure that they provide for students' pastoral care and learning needs they facilitate the development of whānaungatanga and kotahitanga.

To establish positive teacher–student and teacher–whānau relationships, deficit thinking needs to be strongly rejected by schools and teachers. Deficit thinking pathologises the lived experiences of certain children and their wider whānau with detrimental effects on their learning (Bishop, 2005b). Schools and teachers should understand that Māori and Pasifika students can achieve much better results in the New Zealand education system than has generally been apparent to date. Schools and teachers need to believe that Māori and Pasifika students can achieve at the highest levels and that their pastoral care and pedagogy is able to make a positive difference to the students' achievement.

Teachers should understand that how they relate to students impacts significantly on their learning. When teachers care for them as culturally located individuals rather than simply as students studying a particular subject, when humour and fun features in the classroom, when teachers have high expectations of student achievement and provide encouragement to meet those expectations, then the groundwork is laid for the building of positive, synergistic relationships and the development of talent.

However, positive teacher-student relationships alone will not enable talent to be nurtured to the extent that the under-representation issue is addressed. The curriculum that is delivered to students must have sufficient challenge. Students should not be wasting their time becoming bored with studying content that they understood and had mastered years prior to arriving at secondary school. Gifted and talented students need opportunities to study more advanced content and to develop higher-level skills than their age peers. They often have distaste for needless repetition and become frustrated by the comparatively slow pace at which average learners progress. Implicit in having greater challenge is that content will be taught in more depth. However, gifted and talented students also need more breadth and the opportunity to go beyond the prescribed curriculum. Students are more likely to be engaged when their interests are planned and provided for adequately. Teachers who go beyond the requirements of their jobs and provide extra tuition to students, who need it, are able to make a significant difference to their learning. Ultimately gifted and talented Māori and Pasifika students will be more likely to increase their representation in gifted and talented education programmes when teacher-student relationships are positive, and contribute, along with a challenging and relevant curriculum, in providing students with a place to stand (tūrangawaewae).

### ***The role of parents and wider whānau in fostering education***

This study's findings showed that parents have a crucial role in fostering the academic attitude and achievement of their sons. Parents ought to be encouraged in their roles to work with learning institutions in fostering student learning. This

study adds to the vision of *The Māori Education Strategy, Ka Hikitia 2013-2017* (Ministry of Education, 2013) and *The Pasifika Education Plan, 2013-2017* (Ministry of Education, 2012c) to have parents and other whānau engaged in supporting and promoting student learning. Fundamental to parents fostering a positive academic attitude, and high achievement in their children, is the value they themselves place on education. In some cases, parents' own negative experiences of school will need to be set aside in order to focus on meeting the educational needs of their children. They should ensure both their spoken and unspoken messages about school convey to their children the importance of a positive attitude to learning. The onus is on schools to assist parents in providing the support for their children that they need. While it seems that some schools have already developed significant home-school partnerships to encourage students with their learning (Education Review Office, 2010) there is scope to develop this area further. Parents should have high expectations of their children's learning and support those expectations with specific actions, as it seems this is likely to have a positive impact on their learning. A nurturing environment characterised by unconditional love provides the opportunity for children to flourish. There are many facets to such an environment and they will vary from home to home. These do include the willingness to make personal sacrifices for children in order for them to optimise their learning opportunities. They may also include providing for the spiritual dimension and using informal opportunities to teach and learn. The provision of a nurturing home environment is an area in which the wider whānau can play a very significant part.

### ***Role models and mentoring***

The findings of this study provide a strong case for role models and mentors having an important influence on the achievement of gifted and talented boys, in particular those of Pasifika ethnicities. Much has been claimed about the value of role models, but there is no New Zealand research on their specific effects in academic terms for gifted and talented Māori and Pasifika boys. Evidence from this study, suggests Māori and Pasifika students who are successful in the academic field, can be effectively used as role models for others. They can talk to other Māori and Pasifika students about the elements contributing to their success.

The students may have little control over home or school factors but they can take responsibility for, and develop the intrapersonal qualities linked to academic success, and this is where role models and mentoring can be used effectively.

Developing mentoring programmes is an avenue that could be explored further as they have shown the potential to benefit gifted and talented Māori and Pasifika students. Where Māori and/or Pasifika students in a school are in the minority, schools can consider the provision of ethnically-based tutor groups, whānau classes or form classes. They can reflect on the possible benefits of implementing the students' mentoring model used successfully by the Pasifika tutor group in School A. In addition to the tutor group mentoring model, the development of other mentoring programmes may be worth exploring. Special events, such as the hui in this study, have the potential to be a useful means for building mentoring relationships that could continue beyond the hui. A variety of student–student, and teacher–student mentoring has been found to be effective in this study. Ways to develop this further could be canvassed. The involvement of mentors from outside of school may also make a positive difference for students.

#### ***Access to ICT out of school***

Another salient issue arising from this study is that of family access to technology. The findings of this study suggest that one of the barriers to gifted and talented Māori and Pasifika students achieving well is a lack of access to ICT in their homes. Any teacher who sets homework requiring certain ICT to be utilised, should ensure that, outside of normal classroom hours, such as after school, the school makes available ICT facilities and equipment for students who do not have it provided at home. Given the lack of access in some students' homes, schools and teachers should be cautious about setting homework assignments that require them to be able to use the internet or other modern information and communication technologies which they may not have at home. A possible solution is for schools to supply laptops to students and families to purchase or lease them on time payment over a period of years. There is also scope for schools to take the initiative to provide improved ICT access for students through seeking to develop partnerships with businesses or tertiary education providers. Funding

may also be available through other possible partnerships such as through iwi or Pasifika organisations.

### ***Consultation with students and their whānau***

The nature of this study's methodology, in the use of discursive individual and focus group interviews, meant that students and whānau were consulted about School A and School B's provision for gifted and talented Māori and Pasifika boys. I had the perception that this was a new experience for most of them. All stakeholders in education need to listen to the voices of Māori and Pasifika students who have achieved highly within the school system and to the voices of the students' whānau. There is a rich source of wisdom in their experiences and observations that can assist other whānau, schools and teachers to improve learning outcomes for students (The Education Review Office, 2010).

Iwi have recognised the significant role they can play in contributing to the educational well-being of whānau through engagement with the education sector. Durie (2006) identifies three ways iwi have contributed to education and whānau. First, they have established strategic relationships with schools, educational agencies (e.g. NZQA) and local authorities. Second, more direct links have been made to interests of whānau by such initiatives as establishing wānanga where whānau can enrol in programmes that assist them to be full participants in the knowledge society. Third, through revitalising te reo Māori and tikanga Māori they have promoted whānau entry into te ao Māori. Iwi need to continue to play an important part in consultation with students and their whānau. They would be able to be involved in mentoring and advocating for the gifted and talented.

Central to effective consultation with Māori and Pasifika communities is *kanohi kitea* (the "seen face") (Smith, 1999). The collaborative storytelling associated with a narrative inquiry methodology requires face-to-face contact. Even where questionnaires are utilised to gather data, I consider the "seen face" to be important.

### ***Procedural issues***

The findings indicate that there are a range of procedural issues that should be addressed. A comprehensive approach in grappling with these issues is likely to enhance provision for gifted and talented Māori and Pasifika students.

Where issues of on-going conflict arise between Māori and/or Pasifika students and a dean, schools could consider whether the dean is the appropriate person to deal with the conflict. Schools could utilise the GATE director and/or a staff member of the student's own ethnicity to assist in attempting to resolve the conflict. These staff may have a closer affinity to the students concerned and may have an understanding of issues of which the deans may be unaware.

School GATE policies should be reviewed to check to what extent Māori and Pasifika perspectives on giftedness and talent are included within them. If not included they should be redrafted by GATE directors in consultation with Māori and Pasifika staff and whānau in order to include their perspectives. Not only should the policies be reviewed, but they should also be monitored on an on-going basis for their effectiveness, particularly with reference to raising the proportion of Māori and Pasifika students involved in programmes for the gifted and talented.

One of the issues for policies to address is that of identification. The literature generally argues that multiple methods should be used to identify giftedness and talent (Easter, 2011; McAlpine, 2004; Riley et al. 2004; Clark, 2008). This is particularly pertinent for Māori and Pasifika who are under-represented in programmes for the gifted and talented. In addition to using the data from entrance tests, information provided by parents and contributing schools must be considered. Schools need to be aware that Māori and Pasifika parents are unlikely to identify their sons' gifts to schools unless a relationship of trust has been built. Building a relationship of trust with whānau is therefore of paramount importance in improving identification and provision for gifted and talented Māori and Pasifika students. For Pasifika students, the churches are a potential source of rich information about students' gifts and talents. As discussed in the findings, School B already had strong links with the churches, with church elders acting as

intermediaries between the school and the home. Schools with strong links with the churches attended by Pasifika students could use these links to assist in identifying giftedness and talent. Student placements should be reviewed during the course of the year to enable classes to be adjusted in accordance with the emerging gifts and talents that were not evident at the time placements were initially decided. The development and monitoring of Individual Education Plans (IEPs) may be necessary for some students. These are likely to include multilevelling of students and may include dual enrolment with the New Zealand Correspondence School and/or at a university for selected subjects.

Schools could provide experiences for students that integrate all aspects of the Mangō Pare Model such as the hui described in the findings. For gifted and talented Pasifika students, weekend fono could be held with similar goals to those of the hui coupled with culturally relevant activities. A challenge could be to acknowledge and represent the range of Pasifika cultures of all participants. Schools could also explore the value of following up on these experiences with other activities that reinforce the important principles of the initial experience. Hui and fono are ways to make prominent te ao Māori and the Pasifika world. Concentrated time together over two or three days with other students of similar ability and the same or similar ethnicity, coupled with culturally-relevant and challenging programmes could enhance and/or embed a strong sense of racial-ethnic identity in students. When cultural protocols such as karakia to start and end the day and before meals are embraced along with the performance aspects of each culture, and when instructional sessions come from a Māori or Pasifika world view, students are likely to connect with te ao Māori or the Pasifika world. When guest speakers of the students' ethnicity tell their personal stories of overcoming obstacles to achieve and share principles for success as Māori and/or Pasifika, students are likely to connect with them and consider their own life journeys.

### ***Professional development***

During the EHSAS project all teachers in both School A and B received some professional development related to identification and provision for gifted and

talented students. However, with the project having finished several years ago and other priorities having taken its place, there is a danger that the gains in staff awareness and teaching practice may have been lost. Specific to meeting the needs of gifted and talented Māori and Pasifika students, school staff should receive professional development to provide better understanding of Māori and Pasifika beliefs, values and protocols. In addition, they should also receive training in identifying giftedness and talent through observation, and in providing for the gifts and talents that are identified.

When considering the professional development provided in connection with the EHSAS project there are three principles that I believe are crucial to effective professional development. First, professional development needs to be ongoing over at least a year with the issues being revisited at least several times per year. Second, theory and practice need to be integrated. Teachers need to understand why certain practices are effective in enhancing student learning. Third, teachers should be participants in professional communities where ideas and practices can be discussed and informal and formal support given. Interestingly, these three principles all feature (amongst several other principles) in the Best Evidence Synthesis report, *Teacher professional learning and development* (Timperley, Wilson, Barrar & Fung, 2007).

### **Suggestions for further research**

This research investigated issues related to the achievement of highly-performing Māori and Pasifika students in two boys-only secondary schools, one a decile 2 school with a majority of Māori and Pasifika students and the other, a decile 8 school with a minority of Māori and Pasifika students. Across the participants who were interviewed, there was a wide diversity of people, home situations and school experiences. The findings suggest some further research needs.

Further systematic research could focus upon other boys' secondary schools, girls' secondary schools and co-educational secondary schools. The spectrum of secondary schools in which gifted and talented Māori and Pasifika students are educated is much broader than that covered in my study. To research why students

are achieving well in other settings would provide a useful comparison with this study.

Further research could be longitudinal in nature with students tracked four, eight and 12 years after the initial data gathering. This would enable an evaluation to be made of the extent to which success in the junior secondary school is reflected in the senior secondary school and then whether it is carried through into tertiary education and the early stages of the students' careers. It could also reveal interesting data about students' choices, aspirations, motivations and ongoing achievements. It could reveal whether these change or not, and if they do, what the reasons are for change. Furthermore, the students' sources of support at different phases of their lives could be identified.

Additional research could investigate the Mangō Pare model for its applicability beyond the contexts of School A and B. In connection with this, the influence of role models and mentors on the achievement of gifted and talented Māori and Pasifika students could be investigated further.

A final area for further research could explore how most secondary schools with their arbitrary division of knowledge into subjects taught in different classes by different teachers, and their examination focus, affect the learning of Māori and Pasifika students. It would be interesting to pilot a study of an alternative model where students have fewer core teachers and are taught in a more integrated fashion, and to research the effect of this on Māori and Pasifika students in particular. For example, a beginning could be made in Year 9 with the one teacher for both Mathematics and Science and another teacher for both English and Social Studies. Arrowsmith (2013) studied teachers' perceptions and practices in four secondary schools in New Zealand where curriculum integration was offered in three schools as an option for their junior school cohort in Year 9 and 10. In the fourth school, a new school, Niu School (which includes Year 7 and 8 students) an integrated curriculum is provided for all Year 7 to 10 students. The intention at the time of the study was to continue to provide an integrated curriculum through to Year 13 as senior classes began to be added to the school from 2013 onwards. The approaches taken in these schools seemed to be well received by the teachers

involved, and to be in accord with the inquiry learning, integrated programming direction charted in *The New Zealand Curriculum* (Ministry of Education, 2007c). It would be timely now for research to be undertaken of student participants' perceptions of an integrated curriculum and to investigate possible links to achievement in NCEA.

Bevan-Brown (2011a, p. 91) comments: "Programmes for gifted and talented Māori learners should ideally be holistic in nature." However, while results in a high-stakes, subject-based examination system are the barometer by which many of the public view the comparative merits of schools, progress towards more integrated programmes is likely to be slow. An assessment regime that gives weight to testing the skills of inquiry learning, and knowledge and conceptual understanding across multiple subjects, could go some way to speeding up change, to the benefit of gifted and talented Māori and Pasifika learners, and other learners as well.

### **Final remarks**

This thesis explored the stories of academic success amongst Māori and Pasifika boys of secondary school age in two state boys' secondary schools. Given that Māori and Pasifika boys are the lowest-achieving cohorts in the NCEA examinations (New Zealand Qualifications Authority, 2014a, 2014b) their stories are particularly salient. This thesis has a specific focus on highly-achieving Māori and Pasifika secondary school boys, rather than Māori and Pasifika students in general. It makes an original contribution that has the potential to sharpen the focus on arguably the greatest area of need to address within secondary education in New Zealand, Māori and Pasifika boys' achievement.

The stories of the student participant's success are linked to sociocultural aspects of their home and school environments. These aspects have been discussed in terms of three elements of success identified by themselves and their whānau: the support within the home, their intrapersonal qualities, and the contribution of teachers and schools. While individual students identified different components contributing to their success it is apparent that the support of the home,

intrapersonal qualities of students, and support from teachers and schools were consistently found to contribute to student success. These elements are interwoven with each other. Components related to teachers and schools are summarised in the Mangō Pare Model. The Mangō Pare Model could be used in future to assist teachers and schools to understand the paramount importance of relationships and to deliberately focus their attention on pedagogy that is known to work for gifted and talented Māori and Pasifika students. Each of the components, while significant individually, interconnect to provide the necessary support Māori and Pasifika students need to achieve as Māori and Pasifika.

The dominant discourse around secondary schooling in New Zealand has been subject centred and assessment and examination driven. This conforms to what Tyack and Tobin (1994) describe as the ‘grammar’ of schooling. It is unrealistic to expect that there will be imminent change given the Ministry of Education (2012c, 2013) has set the target of 85 per cent of 18 year olds gaining Level 2 of NCEA by 2016. Continuation of this colonial framework is likely to lead to pressure for students to complete this qualification regardless of the quality of learning, reinforcing the assessment and examination-driven nature of secondary schools. Prolongation of the existing grammar of schooling, however, does not provide for the needs of gifted and talented Māori and Pasifika. These students are underserved through our current model and change is needed if education is to meet their needs. The positive flow-on effects for society would be immeasurable.

Traditional boys’ secondary schools have gained a reputation for their hegemonic culture. The question for further research relates to how this discourse and culture conflicts with the pedagogy of the Mangō Pare Model. A part answer is that, for optimum benefit in relation to gifted and talented Māori and Pasifika students’ achievement, the dominant discourse is required to move from formal, top-down style assessment to relationships. Furthermore, the culture needs to shift from hegemonic practices to a true partnership of teachers, students and whānau that honours ability.

Largely through the research and advocacy of Māori and Pasifika educators we now know much more about the needs of Māori and Pasifika students. We need to

bring together that knowledge and the understanding of what counts as giftedness in indigenous cultures and other minoritised ethnicities. In this way the needs of gifted and talented Māori and Pasifika secondary school boys will be able to be better served than they are at present.

In New Zealand, the Te Kotahitanga and He Kakano projects have been of benefit to Māori and other students generally. The Ministry of Education aims to continue the successful work of Te Kotahitanga in the recently launched Kia Eke Panuku: Building on Success project (Howe, 2014). These projects run the risk of not focusing sufficiently on students with exceptional talent. If a school fails to consider a student's capability in assessments, a gifted and talented Māori or Pasifika boy who is gaining Achieved grades in NCEA may consider he is achieving well. However, if he has the ability to achieve Merit or Excellence grades and is coasting through school doing no more than is necessary to gain an Achieved grade, his performance is of concern. Schools need to focus not only on raising students from the Not Achieved to Achieved level but also moving those with talent to the Merit or Excellence levels. It is important that work now goes into establishing appropriate support structures to facilitate this change.

Policy makers and educators should reflect on how the discourse and culture of schools can be changed to enhance the learning of gifted and talented Māori and Pasifika students. They also need to reflect on the important role they play in student success. The gifted and talented boys involved in this study and others like them will be future leaders. They will grow communities through their remarkable abilities and it is imperative that schools ensure such students are not marginalised. The time has come when the under-representation of Māori and Pasifika students in programmes for the gifted and talented needs to be urgently addressed. It is a decade since Keen's (2004) and Riley et al.'s (2004) research identified this as a serious issue. With the national focus on raising Māori and Pasifika achievement we must not settle for simply getting more Māori and Pasifika students over the "Achieved" bar. The focus needs to become harnessing the potential synergy of whānau, teachers and schools which necessitates working in partnership both to develop students' intrapersonal qualities, and improving their achievement beyond their present level. Whānau support, intrapersonal

elements, and schools and teachers can and should work together to enable gifted and talented Māori and Pasifika students to forge new frontiers in their learning, for the ultimate benefit of themselves, their whānau, and the nation.

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## Glossary

<b>ako:</b>	learn, teach
<b>Aotearoa:</b>	Land of the long white cloud, New Zealand
<b>aroha:</b>	love
<b>awhi:</b>	helpfulness
<b>CIE:</b>	Cambridge International Examinations
<b>EHSAS:</b>	Extending High Standards Across Schools
<b>fa'aaloalo:</b>	respect
<b>fono:</b>	meetings great and small, inclusive of Parliament as well as local village meetings
<b>GATE:</b>	Gifted And Talented Education
<b>hapū:</b>	subtribe
<b>hui:</b>	gathering, meeting
<b>iwi:</b>	tribe
<b>Ka Awatea:</b>	Dawning of a new era
<b>kaimoana:</b>	seafood
<b>kanohi kitea:</b>	the seen face
<b>kapa haka:</b>	Māori performing arts
<b>kaumatua:</b>	elder(s)
<b>koha:</b>	gift, donation
<b>koro:</b>	grandfather, old man
<b>koru:</b>	loop, spiral pattern
<b>kotahitanga:</b>	unity, oneness, harmony, bonding
<b>Kura kaupapa Māori:</b>	Total immersion Māori school
<b>mākohakoā akoranga:</b>	learning skills
<b>marae:</b>	meeting place of whānau or iwi
<b>mana:</b>	integrity, prestige, status
<b>mana motuhake:</b>	autonomy, independence
<b>manaaki:</b>	care for others, hospitality
<b>manaakitanga:</b>	hospitality, care, respect, kindness
<b>mangō pare:</b>	hammerhead shark
<b>manuhiri:</b>	guests, visitors
<b>Māori:</b>	indigenous people of New Zealand
<b>Māoritanga:</b>	Māori culture, Māori perspective

<b>marautanga:</b>	curriculum
<b>NCEA:</b>	National Certificate in Educational Achievement
<b>Pākehā:</b>	European, Caucasian
<b>Palagi:</b>	European
<b>Pasifika:</b>	a person of Polynesian, Micronesian or Melanesian descent
<b>pōwhiri:</b>	welcome, opening ceremony
<b>pumanawatanga:</b>	morale, tone
<b>rangatiratanga:</b>	sovereignty, holding and exercising status
<b>roa:</b>	tail
<b>Talanoa:</b>	dialogue without concealment
<b>tamatekapua:</b>	identity
<b>tangata whenua:</b>	local people, people of the land, indigenous people
<b>tapu:</b>	sacred
<b>te ao Māori:</b>	The Māori world
<b>te reo Māori:</b>	Māori language
<b>teina:</b>	younger brother of male, younger sister of female
<b>teu le va:</b>	A Samoan research methodology that emphasises reciprocal relationships. Literally means to cherish, nurture, care for relationships
<b>tiaki:</b>	guidance
<b>tikanga:</b>	culture
<b>tipuna:</b>	ancestor, grandparent
<b>tīpuna:</b>	ancestors, grandparents
<b>toru:</b>	three
<b>tuaiwi:</b>	backbone
<b>tuakana:</b>	older brother of male, older sister of female
<b>tuakana-teina:</b>	older or more expert brother, sister or cousin (traditionally of the same gender) helping and guiding a younger or less expert sibling or cousin
<b>tupuna:</b>	ancestor, grandparent
<b>tūpuna:</b>	ancestors, grandparents
<b>tūrangawaewae:</b>	a place to stand
<b>tutor groups:</b>	groups of students with all year levels represented

<b>waiata:</b>	song, chant
<b>wairua:</b>	spirit, soul, spirituality
<b>wairuatanga:</b>	spirituality
<b>waka:</b>	canoe
<b>wānanga:</b>	learning, communication, problem solving
<b>whakahāngai:</b>	implementation
<b>whakapapa:</b>	genealogy
<b>whakapiringatanga:</b>	specific individual roles and responsibilities that are required in order to achieve individual and group outcomes
<b>whakarāpopoto:</b>	summary
<b>whakatauki:</b>	proverb
<b>whakawhānaungatanga:</b>	the process of establishing relationships
<b>whānau:</b>	extended family
<b>whānaungatanga:</b>	relationship, kinship
<b>Whare wānanga:</b>	Institution of higher learning

# Appendices

## Appendix 1: Topics to be covered by interviews

### 1. Headmasters, senior managers and GATE directors

- Effectiveness of mentoring by School A
- Quality of collaboration between the involved schools
- Impact of EHSAS project on identification and provision for gifted and talented Māori and Pasifika students
- Involvement of whānau, hapū and iwi of Māori students and home and church of Pasifika students in the school particularly with reference to identifying giftedness and talent and making appropriate programme provision
- Overall perceptions of effectiveness of the project
- Practical issues for stakeholders.

### 2. GATE committee members

- Impact of EHSAS project on teaching practice and programmes particularly with reference to gifted and talented Māori and Pasifika students
- Extent to which programmes are meeting the intellectual, emotional and cultural needs of Māori and Pasifika students
- Contribution of whānau, hapū, iwi and church to identification and provision for gifted and talented Māori and Pasifika students
- Overall effectiveness of the project
- Practical issues for stakeholders.

### 3. Parents, whānau and kaumatua

- Extent to which schools are providing for the intellectual, emotional and cultural needs of gifted and talented Māori and Pasifika students
- How gifted and talented Māori and Pasifika students are best identified and provided for
- Overall effectiveness of the project
- Practical issues for stakeholders
- Reasons for boys' achievement.

### 4. Students in focus groups

- Important issues for them as Māori and Pasifika students who have been identified as gifted and talented
- How well intellectual, emotional and cultural needs are being provided for.
- How they consider gifted and talented Māori and Pasifika students should be identified
- Practical issues for them
- Reasons for achievement.

### 5. Students involved in case studies

- How they felt about initial placement in a middle-band class
- How well the middle-band class provided for their intellectual, emotional and cultural needs

- How they felt about the promotion to a top-band class
- What led to the promotion to a top-band class
- What they view as their domains of giftedness and talent
- How they have developed their giftedness and talent in those domains
- How well they consider the top-band class is providing for their intellectual, emotional and cultural needs
- The extent to which whānau, hapū, iwi and church have been involved in recognising and fostering their giftedness and talent
- Ways the school could improve in its identification and provision for gifted and talented Māori and Pasifika students
- Overall effectiveness of the EHSAS project
- Practical issues for them
- Reasons for achievement.

#### **6. Parents/caregivers with students involved in case studies**

- How their son felt about initial placement in a middle-band class
- How well the middle band class provided for his intellectual, emotional and cultural needs
- How they felt about the promotion to a top-band class
- What led to the promotion to a top-band class
- What they view as his domains of giftedness and talent
- How he has developed his giftedness and talent in those domains
- How well they consider the top-band class is providing for his intellectual, emotional and cultural needs
- The extent to which whānau, hapū, iwi and church have been involved in recognising and fostering his giftedness and talent
- Ways the school could improve in its identification and provision for gifted and talented Māori and Pasifika students
- Overall effectiveness of the EHSAS project
- Practical issues for them
- Reasons for boys' achievement.

**Appendix 2: Questionnaire for teachers of Year 9 and 10 GATE classes**

Class: \_\_\_\_\_ Subject: \_\_\_\_\_

School: \_\_\_\_\_ Date: \_\_\_\_\_

1. How have you been involved in the Extending High Standards Across Schools (EHSAS) project?

\_\_\_\_\_

2. Mark 1, 2, 3, 4 or 5 on the scale to show to what extent do you think gifted and talented Māori and Pasifika students have different needs to other gifted and talented students.

1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_  
No difference Considerable  
difference

3. Could you please explain why you gave the numerical ranking you did?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Mark 1, 2, 3, 4 or 5 on the scale to show how well you think your school provides for gifted and talented Māori and Pasifika students.

1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_ 4 \_\_\_\_\_ 5 \_\_\_\_\_  
Poorly Very well

5. Could you please explain why you gave the numerical ranking you did?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. What professional development have you undertaken in the past two years which may be of relevance to the project?

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7. Has the project influenced the content of what is taught or the methods used in teaching? If so, how?

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8. List the ways you currently identify giftedness and talent in Māori and Pasifika students.

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9. List the ways you currently provide for the needs of gifted and talented Māori and Pasifika students.

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10. How effective do you consider the EHSAS project has been to date, and why?

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11. Bearing in mind the aim of the project, what do you consider should be the next steps we should take to continue/increase its success?

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12. What are the important practical issues for you as a stakeholder involved in the project?

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### **Appendix 3: Letter to headmasters**

Graeme Miller  
School A  
Dear

I am currently involved in doctoral study at the University of Waikato and undertaking research examining the Extending High Standards Across Schools (EHSAS) project in which our schools are involved. The research will focus on the mentoring and collaboration process between the three schools with particular reference to its impact on the identification and provision for gifted and talented Māori and Pasifika students. In order for me to do this I need the support and approval of you and your Board of Trustees.

I have for many years had particular interests both in Gifted and Talented Education and Māori and Pasifika students. I completed my Master of Gifted Education degree in 2004 with submission of my thesis on *Perceptions of Giftedness in the Cook Islands Māori Community*. From 1990 to 1999 I was principal of School D, a school with a 42% Māori and 21% Pasifika roll. From 2000 to 2005 I was principal of School E, a school with a 55% Māori roll. I have been Gifted and Talented Education (GATE) director at School A since 2006.

In order for me to gather the data I require I am requesting your support in the following specific ways:

- Presentation of my request to the Board of Trustees and authorising the research.
- Notification of any specific ethical requirements for research in your school.
- Provision of the opportunity to interview you about the project on two occasions.
- Permission to ask the Year 9 and 10 core faculty teachers of accelerate classes to complete a questionnaire on two occasions. I anticipate this will take about 15 minutes on each occasion.
- Permission to interview GATE directors and senior managers involved with the project on two occasions.
- Advice on processes to follow and people to liaise with in order to arrange for me to interview students, their caregivers, other whānau and kaumatua.
- Permission for me to interview the above on two occasions.
- Permission to interview selected gifted and talented Māori and Pasifika students individually as case studies.
- Permission to observe the core subjects in some Year 9 and 10 GATE classes.

I anticipate all interviews will take up to an hour on each occasion and that observations will take around half an hour with an additional half hour for follow up discussion.

All interviews will be recorded and transcripts will be typed up and submitted to participants for checking and editing if required. The recordings and transcripts will be kept in secure storage. Be assured that any information provided will be treated in the strictest confidence and no participants will be individually identifiable in the resulting thesis. Schools will not be identified and pseudonyms will be used. However, those reading the thesis may hazard a guess at the schools involved although individuals are less likely to be able to be identified by readers

because of the numbers involved. The school and individual participants are free to discontinue participation at any time up until the start of data analysis, or to decline to answer particular questions.

This is a very important research project for all concerned. It will contribute to the international research on giftedness and talent and particularly how approaches impact on the identification and provision for gifted and talented students from indigenous and minority ethnic groups. The school will be able to benefit from the research by reviewing its current identification practices and provision for Māori and Pasifika students. This could lead to modifications to identification practices and programme provision. It is hoped that, in addition to being used in the doctoral thesis, some data may be used in conference presentations and journal articles. Any such data will be carefully selected and every effort made to ensure anonymity of data and the protection of participants' identities.

If you have any questions, please contact me. If you have concerns you would like to discuss with someone other than me, please contact my chief supervisor, Dr Roger Moltzen ([rim@waikato.ac.nz](mailto:rim@waikato.ac.nz)).

Attached is a research consent form that I would be most grateful if you could complete and return to me using the enclosed stamped and addressed envelope.

Thank you in anticipation of your support.

Graeme Miller

**CONSENT FORM FOR PARTICIPATION AND INDIVIDUAL INTERVIEW**

I \_\_\_\_\_ give consent for \_\_\_\_\_ Boys' High School to participate in the research project on the EHSAS project and confirm the research project has the approval and support of the Board of Trustees.

I consent to participate in this research project and understand that this means I will participate in an interview of up to 60 minutes duration on two occasions. I have been informed of the content areas it is proposed to cover and I agree to discuss these. I understand that the interviews will be taped, then transcribed and that I will receive a copy of each transcript, which I am free to edit and amend. I consent to the use of anonymous extracts in the written thesis and for these to also be used in associated publications and presentations. I understand that, should the researcher desire at a later stage to refer to me by name, I will be asked for written consent.

This approval is given on the understanding that I am free to withdraw at any stage up until the analysis of data begins.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

#### **Appendix 4: Sample letter to parents/caregivers**

Graeme Miller  
School A

21 October 2008

Dear

Kia ora koe, Talofa lava, Kia orana, Bula, Malo o lelei.

I am involved in research at the University of Waikato examining the Extending High Standards Across Schools (EHSAS) project in which our/your school is involved. An important part of the research is looking at how our/your school identifies and provides for gifted and talented Māori and Pasifika students. In order for me to do this I need some gifted and talented Māori and Pasifika students and their whānau to agree to be interviewed, either individually or in a group. To enable me to interview students I need the approval of their parents/caregivers. I may also need to be able to interview parents/caregivers. Participation of staff, students and whānau from the school in the research has been approved by the school Headmaster and Board of Trustees.

I have for many years had particular interests both in Gifted and Talented Education and Māori and Pasifika students. For 15 years I was principal of two primary schools with a high percentage of Māori/Pasifika students. I completed my Master of Gifted Education degree in 2004 with a thesis on *Perceptions of Giftedness in the Cook Islands Māori Community*. I have been Gifted and Talented Education (GATE) director at School A since 2006.

I need your support by agreeing to be interviewed either individually or in a group on two occasions and your approval to interview your sons. If I need to interview you, I am happy for you to choose whether you wish to be interviewed individually or in a group and to discuss with me the best time and place for the interview. I am happy to go to people's homes to conduct interviews if desired. I welcome your input into this study including the direction of the interviews.

All interviews will be recorded and transcripts will be typed up and given to participants for checking and editing if required. The recordings and transcripts will be kept in secure storage. Be assured that any information provided will be confidential and none of the participants will be able to be identified in the resulting thesis. You and/or your sons are, entirely free to discontinue your participation at any time up until the start of data analysis or to decline to answer any questions you would rather not discuss.

This is a very important research project for all concerned. It will contribute to the international research on giftedness and talent and indigenous and minority ethnic groups. It is hoped that, in addition to being used in the doctorate thesis, some data may be used in conference papers and journal articles. Any such data will be carefully selected and every effort made to ensure anonymity of data and

the protection of participants' identities. I hope that you may benefit too by having your voice heard and perspectives considered on this important topic.

If you have any questions, please contact me. If you have concerns you would like to discuss with someone other than me, please contact my chief supervisor, Dr Roger Moltzen ([rim@waikato.ac.nz](mailto:rim@waikato.ac.nz)).

Attached is a consent form I request you complete and return to me in person or in the stamped, addressed envelope provided.

Thank you in anticipation of your support and participation.

Graeme Miller

## CONSENT FORM FOR PARENTS/CAREGIVERS

After being informed about what is involved in the research and what is expected of me, I consent to participate in this project and I consent to my son's participation.

I give consent with the understanding that;

- My son and I will have the opportunity to change or edit the transcript of the interviews in which we are involved, before the report is written.
- My son and I may withdraw from the study at any stage up to the start of data analysis.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

## Appendix 5: Letter to teachers

Graeme Miller  
School A

Dear

I am currently involved in doctoral study at the University of Waikato and undertaking research examining the Extending High Standards Across Schools (EHSAS) project in which our schools are involved. The research will focus on the mentoring and collaboration process between the three schools with particular reference to its impact on the identification and provision for gifted and talented Māori and Pasifika students. In order for me to do this I need the support and approval of you and your Board of Trustees.

I have for many years had particular interests both in Gifted and Talented Education and Māori and Pasifika students. I completed my Master of Gifted Education degree in 2004 with submission of my thesis on *Perceptions of Giftedness in the Cook Islands Māori Community*. From 1990 to 1999 I was principal of School D, a school with a 42% Māori and 21% Pasifika roll. From 2000 to 2005 I was principal of School E, a school with a 55% Māori roll. I have been Gifted and Talented Education (GATE) director at School A since 2006.

In order for me to gather the data I require I will need your support in at least one of the following ways:

- The opportunity to interview you about the project on two occasions. I anticipate this will be for up to an hour on each occasion (Senior managers, faculty representatives and GATE directors).
- Completion of a questionnaire on two occasions (Year 9 and 10 core faculty teachers).
- The opportunity to observe for a single period in class on two occasions (selected Year 9 and/or 10 core faculty teachers).

Classroom observations are for the purpose of observing gifted and talented Māori and Pasifika students in terms of their interactions with the teacher and with other students. Feedback will be provided to teacher participants following observations. Notes from the observations are confidential to the participant and the researcher and cannot be used for purposes other than providing information on the project. All interviews will be recorded and transcripts will be typed up and submitted to participants for checking and editing if required. The recordings and transcripts will be kept in secure storage. Be assured that any information provided will be treated in the strictest confidence and none of the participants will be individually identifiable in the resulting thesis. You are, entirely free to discontinue your participation at any time up until the start of data analysis or to decline to answer particular questions

This is a very important research project for all concerned. It will contribute to the international research on giftedness and talent and particularly how approaches impact on the identification and provision for gifted and talented students from indigenous and minority ethnic groups. The school will be able to

benefit from the research by reviewing its current identification practices and provision for Māori and Pasifika students. This could lead to modifications to identification practices and programme provision. It is hoped that, in addition to being used in the doctoral thesis, some data may be used in conference presentations and journal articles. Any such data will be carefully selected and every effort made to ensure anonymity of data and the protection of participants' identities.

If you have any questions, please contact me. If you have concerns you would like to discuss with someone other than me, please contact my chief supervisor, Dr Roger Moltzen ([rim@waikato.ac.nz](mailto:rim@waikato.ac.nz)).

Attached is a research consent form that I would be most grateful if you could complete and return to me using the enclosed stamped and addressed envelope.

Thank you in anticipation of your support.

Graeme Miller

**CONSENT FORM FOR QUESTIONNAIRE/INDIVIDUAL INTERVIEW/CLASSROOM OBSERVATION**

I consent to participate in this research project and understand that this means I will participate in one of the following:

- Completion of a questionnaire taking about 15 minutes on two occasions
- an interview of up to 60 minutes duration on two occasions
- a classroom observation of one period followed by an interview/discussion of up to 30 minutes on two occasions.

I have been informed of the content areas it is proposed to cover and I agree to discuss these. I understand that the interviews will be taped, then transcribed and that I will receive a copy of each transcript, which I am free to edit and amend. I consent to the use of anonymous extracts in the written thesis and for these to also be used in associated publications and presentations. I understand that, should the researcher desire at a later stage to refer to me by name, I will be asked for written consent.

This approval is given on the understanding that I am free to withdraw at any stage up until the analysis of data begins.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

## Appendix 6: Letter to students/whānau

Graeme Miller  
School A

Dear

Kia ora koe, Talofa lava, Kia orana, Bula, Malo o lelei.

I am involved in research at the University of Waikato examining the Extending High Standards Across Schools (EHSAS) project in which our/your school is involved. An important part of the research is looking at how our/your school identifies and provides for gifted and talented Māori and Pasifika students. In order for me to do this I need some gifted and talented Māori and Pasifika students and their whānau to agree to be interviewed, either individually or in a group. Participation of staff, students and whānau from the school in the research has been approved by the school Headmaster and Board of Trustees.

I have for many years had particular interests both in Gifted and Talented Education and Māori and Pasifika students. For 15 years I was principal of two primary schools with a high percentage of Māori/Pasifika students. I completed my Master of Gifted Education degree in 2004 with a thesis on *Perceptions of Giftedness in the Cook Islands Māori Community*. I have been Gifted and Talented Education (GATE) director at School A since 2006.

I will need your support by agreeing to be interviewed either individually or in a group on two occasions. I am happy for you to choose whether you wish to be interviewed individually or in a group and to discuss with me the best time and place for the interview.

All interviews will be recorded and transcripts will be typed up and given to participants for checking and editing if required. The recordings and transcripts will be kept in secure storage. Be assured that any information provided will be confidential and none of the participants will be able to be identified in the resulting thesis. You are, entirely free to discontinue your participation at any time up until the start of data analysis or to decline to answer any questions you would rather not discuss.

This is a very important research project for all concerned. It will contribute to the international research on giftedness and talent and indigenous and minority ethnic groups. It is hoped that, in addition to being used in the doctorate thesis, some data may be used in conference presentations and journal articles. Any such data will be carefully selected and every effort made to ensure anonymity of data and the protection of participants' identities. I hope that you too may benefit by having your voice heard and perspectives considered on this important topic.

If you have any questions, please contact me. If you have concerns you would like to discuss with someone other than me, please contact my chief supervisor, Dr Roger Moltzen ([rim@waikato.ac.nz](mailto:rim@waikato.ac.nz)).

Attached is a consent form I request you complete and return to me in person or in the stamped, addressed envelope provided.

Thank you in anticipation of your support and participation.

Graeme Miller

## CONSENT FORM FOR STUDENTS/WHĀNAU

After being informed about what is involved in the research and what is expected of me, I consent to participate in this project.

I give consent with the understanding that;

- I will have the opportunity to change or edit the transcript of the interview in which I am involved, before the report is written.
- I may withdraw from the study at any stage up to the start of data analysis.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

## **Appendix 7: Letter to kaumatua or iwi representative**

Graeme Miller  
School A

Dear

Kia ora koe, Talofa lava, Kia orana, Bula, Malo o lelei.

I am involved in research at the University of Waikato examining the Extending High Standards Across Schools (EHSAS) project in which our/your school is involved. An important part of the research is looking at how \_\_\_\_\_ Boys' High School identifies and provides for gifted and talented Māori and Pasifika students. In order for me to do this I need some gifted and talented Māori and Pasifika students and their whānau to agree to be interviewed, either individually or in a group. To enable me to interview students I need the approval of their parents/caregivers. For the study to proceed successfully I also need the support and advice of a kaumatua or iwi representative. Participation of staff, students and whānau from the school in the research has been approved by the school Headmaster and Board of Trustees.

I have for many years had particular interests both in Gifted and Talented Education and Māori and Pasifika students. For 15 years I was principal of two primary schools with a high percentage of Māori/Pasifika students. I completed my Master of Gifted Education degree in 2004 with a thesis on *Perceptions of Giftedness in the Cook Islands Māori Community*. I have been Gifted and Talented Education (GATE) director at School A since 2006.

I will need your support by agreeing to be interviewed on two occasions. I am happy for you to choose whether you wish to be interviewed individually or in a group and to discuss with me the best time and place for the interview. I am happy to go to people's homes to conduct interviews if desired. I welcome your input into this study including the direction of the interviews.

All interviews will be recorded and transcripts will be typed up and given to participants for checking and editing if required. The recordings and transcripts will be kept in secure storage. Be assured that any information provided will be confidential and none of the participants will be able to be identified in the resulting thesis. You are, entirely free to discontinue your participation at any time up until the start of data analysis or to decline to answer any questions you would rather not discuss.

This is a very important research project for all concerned. It will contribute to the international research on giftedness and talent and indigenous and minority ethnic groups. It is hoped that, in addition to being used in the doctorate thesis, some data may be used in conference papers and journal articles. Any such data will be carefully selected and every effort made to ensure anonymity of data and the protection of participants' identities. I hope that you too may benefit by having your voice heard and perspectives considered on this important topic.

If you have any questions, please contact me. If you have concerns you would like to discuss with someone other than me, please contact my chief supervisor, Dr Roger Moltzen ([rim@waikato.ac.nz](mailto:rim@waikato.ac.nz)).

Attached is a consent form I request you complete and return to me in person or in the stamped, addressed envelope provided.

Thank you in anticipation of your support and participation.

Graeme Miller

## CONSENT FORM FOR KAUMATUA OR IWI REPRESENTATIVE

After being informed about what is involved in the research and what is expected of me, I consent to participate in this project.

I give consent with the understanding that;

- I will have the opportunity to change or edit the transcript of the interview in which I am involved, before the report is written.
- I may withdraw from the study at any stage up to the start of data analysis.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

## **Appendix 8: Criteria for classroom observations**

- Academic challenge of lesson
- Emotional security of classroom, particularly for Māori and Pasifika students
- Culturally relevant contexts for learning, particularly for Māori and Pasifika students
- Degree of engagement of Māori and Pasifika students