An Investigation into how Māori Students who are Gifted and Talented are identified in Mainstream Schools

A thesis presented in partial fulfilment of the
requirements for the degree of
Master in Education
at Massey University,
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Acknowledgements

First and foremost, I would like to acknowledge and thank my family, Marty, Hawaiiki and Sophia, who have given me the time, space and encouragement to make this thesis a reality. A special thank you to Marty, for giving up soccer to support me this year and cooking dinner *and* doing the dishes every night, you're a legend!

A huge thank you to Mum and Dad for the numerous ways you have supported me in this journey throughout the year, especially I thank you for always being there when I need you, no matter how big or small the need.

Thank you to my supervisors, Tracy Riley and Jill Bevan-Brown, for providing quick answers to my questions and turning around super speedy feedback when I needed it. You are both incredibly knowledgeable, amazing women who inspired me throughout this journey.

I would also like to acknowledge the support I received from Bream Bay College and the Ministry of Education in giving me the opportunity to accept a study award to pursue this study.

Finally, I would like to sincerely thank the schools that took the time be a part of this research, without you this would not have been possible. Doing this research has made me realise how important it is to take the time to complete surveys, as there is someone on the other end relying on the data you may provide!

Abstract

This study examined the current practices used by 11 schools in one region of Aotearoa New Zealand when identifying Māori students who are gifted and talented. It sought to establish and discuss definitions and identification procedures schools are using as well as the barriers and challenges that schools face when attempting to identify Māori students who are gifted and talented.

A multi-method approach to gathering data was used. Survey research methodology was used to gain information from principals and teachers in charge of gifted and talented education. Content analysis was used to analyse the policies and documents the schools used when identifying gifted and talented students to cross-reference and add to data gathered through the survey.

The key finding of this study was that the identification of Māori students who are gifted and talented was an area that the majority of sample schools were not confident in. Several of the schools involved in the research indicated this was an area they were pursuing professional development and learning in. The research indicates that although some schools have definitions and identification practices which are culturally responsive, their practices are not resulting in the formal identification of the numbers of gifted and talented Māori students that are suggested by the literature.

The research concludes that culturally responsive environments are the most appropriate way of generating effective identification practices, but in order to create these teachers need to have the knowledge and expertise required. As the main barrier to culturally responsive identification of Māori students who are gifted and talented is the lack of teacher expertise and knowledge, there is a major need for ongoing professional development and learning in this area.

Glossary

Definitions of words used in this text were taken from the Māori Dictionary (www.maoridictionary.co.nz) for the specific context used in this research.

Āwhinatanga	Helping, assisting.
Haka	Performance of the haka - vigorous dances with actions and rhythmically shouted words. A general term for several types of such dances.
Hapū	Kinship group, tribe, sub-tribe - section of a large kinship group.
Ihi	Essential force, excitement, power, charm, personal magnetism – psychic force as opposed to spiritual power.
Iwi	Extended kinship group, tribe, nation, people, nationality, race - often refers to a large group of people descended from a common ancestor.
Kaiako	Teacher, instructor.
Kaitiakitanga	Guardianship, trustee.
Karakia	Incantation, ritual chant, chant, intoned incantation - recited rapidly using traditional language, symbols and structures.
Karanga	Formal call, ceremonial call of welcome to visitors onto a marae, or equivalent venue, at the start of a *pōwhiri*.
Kaumātua	Adult, elder.
Kaupapa Māori	Māori ideology - a philosophical doctrine, incorporating the knowledge, skills, attitudes and values of Māori society.
Kōhanga reo	Māori language preschool.
Kowhaiwhai	Motifs and symbols.
Mana	Prestige, authority, control, power, influence, status, spiritual power, charisma.
Manaakitanga	Hospitality, kindness.
Māoritanga	Māori culture, practices and beliefs.
Mātauranga	Education, knowledge, wisdom, understanding, skill.
Mau rākau	Wield weapons.
Mihimihi	Speech of greeting, tribute.

Poi	Poi dance – songs performed, usually by women, in which the poi is swung in various movements to accompany singing.
Rangatiratanga	Sovereignty, chieftainship, right to exercise authority, chiefly autonomy, self-determination, self-management, ownership, leadership of a social group, domain of the *rangatira*, noble birth.
Raranga	Weaving.
Taiaha	A long weapon of hard wood with one end carved and often decorated with dogs' hair.
Tautoko	To support, prop up, verify, advocate, accept (an invitation), agree.
Te Mahi Rēhia	Sport and recreational pursuits.
Tikanga	Correct procedure, custom, habit, lore, method, manner, rule, way, code, meaning, plan, practice, convention.
Toi whakaari	Performing arts.
Tukutuku	Ornamental lattice-work - used particularly between carvings around the walls of meeting houses.
Waiata	Song, singing.
Wairua	Spirit, soul, quintessence - spirit of a person which exists beyond death.
Wairuatanga	Spirituality.
Wana	Be exciting, thrilling, inspiring awe.
Wehi	To be awesome, afraid, fear.
Whaikōrero	Oratory, oration, formal speech-making.
Whakairo	Carving.
Whakapapa	Genealogy, genealogical table, lineage, descent.
Whakataukī	Proverb, saying, cryptic saying, aphorism.
Whānau	Extended family, family group.
Whānaungatanga	Relationship, kinship, sense of family connection - a relationship through shared experiences and working together which provides people with a sense of belonging. Develops as a result of kinship rights and obligations, which also serve to strengthen each member of the kin group. Also extends to others to whom one develops a close familial, friendship or reciprocal relationship.

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Chapter One: Thesis Overview

Research Problem

Gifted and talented students can become the technological, political and societal leaders of tomorrow. These children are the scientists, the doctors, the artists that will contribute to the nation's cultural heritage and future lifestyle. Helping children learn and grow is a goal of every school. Implicit in that goal is an understanding of how to cater for differing populations of children. In every culture, people who display above average abilities exist; this cannot be disputed. Therefore, as Ford (2010) argues, there should be little or no under-representation of diverse cultures in gifted and talented education. However, as the abilities that are valued or what it means to be gifted and talented differ from culture to culture (Sternberg, 2007), students from cultures that differ from the majority are often overlooked when teachers are looking to identify gifts and talents. Historically, world-wide, indigenous education has been dominated by deficit model approaches (Ford, 2010); this approach hinders educators' ability and willingness to recognise the strengths of students from diverse cultural groups. Recently there has been a shift in thinking about the purpose of gifted and talented education and the works of Chaffey (2008), Macfarlane (2004) and Webber (2011) have demonstrated that gifted education can act as a means to reverse this model and contribute greatly to the emergence of equitable education outcomes for all students from minority cultures.

In Aotearoa New Zealand this has been recognised in theory for some time and has been prescribed in one of the Ministry of Education's core principles which states that "Māori perspectives and values are embodied in all aspects of the education of gifted and talented learners." (Ministry of Education, 2012a). However Riley, Bevan-Brown, Bicknell, Carroll-Lind and Kearney's (2004) research clearly demonstrates that this principle is not being put into practice in many schools and the Education Review Office (2008) report on schools' provision for gifted and talented students reiterated this finding.   The Education Review Office discovered that only five percent of schools

had a definition of giftedness and talent and an identification process that was highly inclusive and appropriate for the cultural context of the school, with a further 40% being inclusive and appropriate. That leaves 55% of schools whose definition and identification processes are only somewhat or not at all inclusive and culturally appropriate. But as Bevan-Brown (2009) explains, this is not because teachers are opposed to the principles of the Treaty of Waitangi or those set out by the Ministry of Education, but rather that they lack the knowledge and expertise to know how to identify and appropriately cater for Māori students who are gifted and talented.

My inspiration for this research developed through my interest and work in gifted and talented education. I came to realise that there seemed to be a lack of understanding and confidence among teachers when working with Māori students who are gifted and talented. As is described above by Bevan-Brown (2009), on discussion with these teachers and when reflecting on my own practice it was obviously not because teachers thought these students should not be identified, it was because the teachers feel that they lack knowledge and confidence in doing so. But as Macfarlane, Christensen, Comerford, Martin and York (2010) describe, it is important that teachers realise that they do not have to be of the same culture as the students in order to be effective, but it is important that they are able to 'connect' with their students' cultures and understand what it means to be gifted and talented in that culture.

To tackle the definition, identification *and* provision of gifted and talented education for Māori learners is beyond the scope of this research so the issue to be investigated is that around the culturally appropriate identification of Māori students who are gifted and talented. Anecdotally, I have seen that in mainstream schools where the majority of teachers are of Pākeha ethnicity, teachers often feel uncomfortable or unsure of how to go about identifying the gifts and talents of Māori children. The research base specifically aimed at Māori gifted and talented education is very small, consisting of only two published empirical studies, relevant to this study and accessible to me as a student researcher. The first was carried out by Jill Bevan-Brown (1993)

nearly twenty years ago and the second by Heather Jenkins (2002) was published a decade ago. Therefore the aim of this research is to examine the current practices used when identifying Māori students who are gifted and talented. It is not the intention of this research to suggest that to identify these students is enough. It must be stated here that employing culturally appropriate identification practices is only the beginning and that once identified, appropriate provisions need to be developed and utilised. As the Ministry of Education (2012a) describes, identifying gifted and talented students is the link between definition and programmes and appropriate identification methods provide a means to developing and implementing appropriate educational programmes. This research provides a first step in discovering what is happening for Māori students who are gifted and talented in mainstream schools in one part of Aotearoa New Zealand. Further research needs to be undertaken into assessing the programmes that these students are encountering and the cultural appropriateness of these.

Research Questions

This research aims to answer the following questions about the schools in one region of Aotearoa New Zealand using survey research and content analysis:

1. What are the current practices used when identifying Māori students who are gifted and talented in mainstream schools in one region of Aotearoa New Zealand?
2. What aspects of practice do these schools find enable them to effectively identify Māori students who are gifted and talented?
3. Do these schools experience any barriers and/or challenges when identifying Māori students who are gifted and talented? If so, what are these barriers and/or challenges and how have they been addressed?
4. How many schools have undertaken Professional Learning and Development (PLD) in the area of Māori giftedness and talent in the last three years? Is there a relationship between the amount of PLD undertaken and the cultural responsiveness of the schools' identification practices?

Structure of Thesis

This thesis is set out in six chapters and reports on the intentions, literature, methodology, results and conclusions of the research undertaken.

Chapter One describes the motivation for this research and shares the research questions.

Chapter Two clarifies the definitions of terms important to this research and reviews the literature related to the topic.

Chapter Three explains the research procedures used as they relate to the methodological theory of survey research and content analysis.

Chapter Four presents the results gained from the research tools in relation to the research questions.

Chapter Five provides a discussion of the results and how they relate to the literature.

Chapter Six concludes the thesis and provides an overview of the significant results and recommendations for further research and changes to policies and practices.

Chapter Two: Literature Review

Chapter Overview

Gifted and talented students are often neglected in our schools (Cathcart, 2005; Riley et al., 2004). If Aotearoa New Zealand's education system is failing to identify and provide adequate programmes for gifted and talented students in general, then what is the situation for Māori students who are gifted and talented? This literature review defines the terminology used in this research and discusses the issues and recommendations that arise in the current international and national literature about the identification of gifted and talented students from minority cultures, including Māori students.

Terminology

Gifted and talented, gifted, talented, special abilities and able are just some of the words used to describe students, or indeed people, with above average abilities. The terminology used to describe these students varies considerably from country to country, culture to culture and author to author. There is no one correct term, rather a lot of terms that, on the surface, appear to mean basically the same thing. McAlpine (2004, p. 33) explains however that "while there is a commonality of meaning associated with giftedness and talent, there is also a diversity of interpretations reflecting different social and ethnic groups."

In contemporary Aotearoa New Zealand literature and practice the most commonly used term is 'gifted and talented', which is used to describe a multi-category concept denoting a higher than average level of ability in a wide range of possible areas when compared to ones peers (Ministry of Education, 2012a). Historically, gifted and talented, or indeed any of the terms above, had a far narrower definition and were applied to students who demonstrated a high intelligence quotient (IQ) or musical and

other artistic protégés. Over time, concepts of giftedness and talent have evolved and it is now recognised that each culture has their own concept of giftedness and talent, because each culture varies in the value placed on different abilities and qualities (Baldwin, 2002; Banks, 2010; Bevan-Brown, 2011; Bracken, 2008; Briggs, Reis, & Sullivan, 2008; Chaffey, 2009; Sternberg, 2007; VanTassel, 2009). As the Ministry of Education (2012a) describes, Aotearoa New Zealand is a multicultural society and each cultural groups' concept of giftedness and talent is shaped by its beliefs, values, attitudes, and customs. Therefore when the definition is so broad and each culture has a varied conception, identifying students displaying (or with the potential to display) giftedness and talent is fraught with issues.

The other main terms which require definition and clarification for this study are what constitutes an indigenous culture and how students are identified as Māori. As Robson and Reid (2001) note, indigenous cultures differ from minority cultures as they have different rights and standing within a country. Minority cultures are those that have less representation than the dominant culture of a population, whereas indigenous cultures are those that were the original inhabitants of a country (Robson & Reid, 2001). Culturally diverse is another term used by many authors (Baldwin, 2002; Briggs, Reis, & Sullivan, 2008; Ford, 2010; VanTassel, 2009). This term is used to include all ethnic groups that are not the dominant culture. In the Aotearoa New Zealand context, Māori are the indigenous culture or tangata whenua and have rights guaranteed to them as such through the Treaty of Waitangi; however, they are also a minority group by numbers and are culturally diverse from the majority culture (Statistics New Zealand, 2012).

To identify students as Māori today is not a simple matter of assessing physical appearance. Many who have Māori heritage and identify themselves as Māori may also belong to one or more other ethnic groups (Statistics New Zealand, 2012) and therefore not outwardly have the physical attributes commonly associated with being Māori. Conversely, as Robson and Reid (2001) describe, students who may physically

appear to be Māori may not identify themselves as such for the same reasons. Therefore for the purposes of this research, the term Māori is used to indicate any person of Māori descent who identifies themselves as being Māori, which is the definition currently used by Statistics New Zealand (2012).

Banks (2010) reminds us, however, that although the characteristics of groups can be described depending on gender, social-class, race, ethnicity, religious, language or exceptionality, it must be remembered that individuals within these groups manifest the common behaviours to various degrees. It must also be remembered that students are members of several groups at the same time and of varying combinations (Banks, 2010). Bevan-Brown's (1993) research takes this into account and she notes in her introduction that "Māori, like any other culture, are a diverse group of people" (p. 4). Bevan-Brown raises this point again in her 2009 *Apex: The New Zealand Journal for Gifted Education* article where she warns that when engaging in discussion about the influence of culture on giftedness we must be careful not to stereotype students because of their culture.

Identifying Gifted and Talented Students from Indigenous Cultures

Why is it an issue?

Descriptions of disproportionately low representation of indigenous cultures in gifted and talented programmes abound in the international and national research and literature about the topic (Bevan-Brown, 1993, 2009, 2011; Bracken, 2008; Briggs, Reis, & Sullivan, 2008; Chaffey, 2009; Education Review Office, 2008; Ford, 2010; Jenkins, 2002; McKenzie, 2004; Riley et al., 2004; Strong Scott, Stoyko Deuel, Jean-Francois, & Urbano, 2004). As Ford (2010) states, past and current efforts to redress under-representation problems have been inadequate and misdirected and this has resulted in what may be the most segregated programmes that exist in public schools. Obviously in order to be included in a gifted and talented programme, students have to first be identified as fitting the criteria set out for inclusion into such a programme.

Riley et al. (2004) and Ford (2010) demonstrate however that nationally and internationally, students from ethnic minority and indigenous groups are consistently under-represented in gifted and talented programmes and provisions because of a lack of effective identification practices. The Education Review Office's research into 315 schools' provision for gifted and talented students, found that "almost all of the schools [75%] did not include Māori theories and knowledge or multi-culturally appropriate methods in their identification process" (Education Review Office, 2008, p. 21).

The issue of appropriately identifying and providing for culturally diverse gifted and talented students is not a new one. As Baldwin (2002) and Briggs, Reis and Sullivan (2008) describe, since the 1970s the importance of gifted and talented education has been recognised and the need to reform and enhance the education of culturally diverse students who are gifted and talented has been acknowledged. A national survey carried out in the US, cited by Gallagher (2002), found that only around 10% of students performing at the highest level were not from the dominant culture, even though they represent 33% of the population. Statistics available from the Elementary and Secondary School Civil Rights Survey carried out two-yearly from 1998-2004 (cited in Ford, 2010) demonstrate that not only are culturally diverse students under-represented in gifted and talented programmes, but students from the dominant culture are over-represented. This data is presented in Table 1 on the following page.

Table 1: US Gifted Education Demographics for 1998-2004

Race/ Ethnicity	1998 School District %	Gifted & Talented %	2000 School District %	Gifted & Talented %	2002 School District %	Gifted & Talented %	2004 School District %	Gifted & Talented %
American Indian/Alaskan Native	1.1	0.87	1.16	0.91	1.21	0.93	1.21	0.93
Black	17.0	8.40	16.99	8.23	17.16	8.43	17.16	8.43
Hispanic/ Latino	14.3	8.63	16.13	9.54	17.8	10.41	17.8	10.41
Asian/ Pacific Islander	4.0	6.57	4.14	7.00	4.42	7.64	4.42	7.64
White	63.7	75.53	61.68	74.24	59.42	72.59	59.42	72.69
Total	100	100	100	100	100	100	100	100

Interestingly, in this survey, the Asian and Pacific Islander subsection also demonstrated over-representation. Ford (2010) contends that Asian Americans often experience positive educational stereotypes, however does not distinguish between them and Pacific Island students. It seems that these categories are over-simplified in US research, whereas in Aotearoa New Zealand, students identifying as Pacific Islanders are one of the groups the Ministry of Education identifies as at risk of underachieving (Amituanai-Toloa, McNaughton, Kuin Lai & Airini, 2010).

The Aotearoa New Zealand Context

It is a requirement of the Minstry of Education (2012b) through the National Administration Guideline 1(c) iii that all students who are gifted and talented are identified. However, there is plenty of anecdotal evidence (Bevan-Brown, 1993; 2005a; 2005b; 2009; Cathcart, 2005; Cathcart & Pou, 1994; Education Review Office, 2008; Jenkins, 2002; Jenkins, Moltzen, & Macfarlane, 2004; McKenzie, 2001; Riley et al., 2004; Webber, 2011) and some empirical evidence (Keen, 2005) that indicates that relatively few children from minority cultures, particularly Māori, enrolled in schools in Aotearoa New Zealand are recognised as having exceptional abilities. This is not because they do not exist. Cathcart (2005) reports that overseas research shows that within all cultural groups, similar numbers of students with gifts and talents are found.

One of the Ministry of Education's (2012a) core principles for supporting the achievement and well-being of gifted and talented learners recognises that there are gifted and talented learners in every demographic of Aotearoa New Zealand and this must be reflected in educational policy and practice.

 The body of work specifically relating to Māori gifted and talented education appears small, but as Webber (2011) notes, it clearly defines the boundaries of the topic and the ongoing concerns of the field. The earliest literature related to Māori perspectives of giftedness and talent appears in the early 1990s, with Reid's (1989, 1990, 1991, 1992) publications. Reid made three main conclusions throughout these publications and it is worrying that some of the issues he raised are still of concern today. The issues Reid discussed were as follows:

- The predominantly mono-cultural (Pākeha dominated) education system has a negative influence on the identification and provision of appropriate programmes for gifted and talented Māori students;
- The over emphasis placed on results from Eurocentric tests puts Māori at a disadvantage;
- Parental, peer and self-nominations are ineffectual when identifying Māori students who are gifted and talented.

The first two issues arise in much of the literature (Bevan-Brown, 1993, 2009, 2011; Jenkins, 2002; Webber, 2011); however the third point noted here is disputed in the research carried out by Bevan-Brown (1993) and Jenkins (2002). Bevan-Brown found that while parental nominations may not be forthcoming, using other whānau networks and requesting nominations from kaumātua, kōhanga reo kaiako and others who have had a role in the child's life is appropriate and effective.

Following Reid's (1992, July) challenge that someone who identifies as Māori should tackle the issue of Māori giftedness and talent, the first formal research specifically

focused on this area was published by Bevan-Brown (1993) entitled *Special Abilities: A Māori Perspective*. Much of the literature published in this area since that time uses this Masters research as a basis. Bevan-Brown investigated traditional and contemporary conceptions of Māori giftedness and talent and gathered opinion from Māori from a range of educational and socio-economic backgrounds, as well as wide iwi and hapū representation on how best to identify and cater to students. She found that traditional and contemporary conceptions of giftedness and talent in Māoridom were similar and were holistic in nature. She also found that the concepts were firmly grounded in kaupapa Māori beliefs and were broad and wide-ranging, with importance placed on both abilities and qualities, similar to other multi-categorical approaches towards defining giftedness that have been described by Gagné (2003) and Gardner (2006). What is different to Gagné and Gardner's more Eurocentric concepts, however, is that, incorporated into the Māori conception, is an expectation that gifts and talents are utilised in the service of or to benefit others, not just for the good of the individual, as well as the concepts of spiritual and group giftedness and talent.

Interestingly, suggestions that in order for Māori students to succeed, Māoritanga must be taught and encouraged, strong supportive whānau networks should be developed and that teachers should be trained in Māoritanga and the provision of culturally appropriate education, developed from Bevan-Brown's research over a decade ago, are all incorporated into the Ministry of Education's *Ka Hikitia – Managing for Success: The Māori Education Strategy* (2008) in some form. The aim of this strategy is to "set the direction for improving education outcomes for and with Māori learners" (p.10). Although the Ministry of Education has developed and implemented many programmes which have provided support for aspects of the teaching of Māori culture and its importance over the years, it is concerning that while Bevan-Brown's findings have been available for nearly two decades, only now is the Ministry of Education bringing all these threads together and explicitly encouraging these developments in education for Māori as a whole strategy. The Ministry of Education's (2012a) most recent publication about gifted and talented education – *Gifted and Talented Students: Meeting their needs in New Zealand Schools* – also recognises the

importance of the strategies recommended by *Ka Hikitia* and acknowledges Bevan-Brown's (1993) research more fully and notes that schools must ensure that Māori students are provided with high quality culturally responsive education that incorporates their identity, language and culture as well as engages their whānau, iwi and wider communities.

Bevan-Brown (2009) describes that identification procedures which are appropriate and effective for one culture may be inappropriate and ineffective for another. Therefore when developing identification procedures, teachers need to consider whether the strategies they employ will accurately identify students from all cultural groups present in their class. However, as Jenkins, Moltzen and Macfarlane (2004) note, despite the broader, more inclusive concept of giftedness that is promoted by the government (Ministry of Education, 2000; 2002; 2012), practices within mainstream gifted education in Aotearoa New Zealand remain fundamentally Eurocentric. Cathcart (2005) and Webber (2011) note that culture is reflected in what happens in schools in a whole range of ways; therefore it is not surprising that few Māori students are identified as gifted and talented.

The literature around Māori gifted and talented education describes a common suggestion for what needs to happen in order to more appropriately identify these students. According to many authors, having a culturally responsive environment plays the greatest part in allowing Māori students who are gifted and talented to have these gifts and talents recognised (Bevan-Brown, 1993, 2005a, 2005b, 2009; Cathcart, 2005; Jenkins, Moltzen & Macfarlane, 2004; Mahaki & Mahaki, 2007; Riley et al., 2004; Webber, 2011).   Bevan-Brown (2009, p. 2) believes that a culturally responsive environment requires teachers who "value and support cultural diversity in general and Māori culture in particular; programmes that incorporate cultural knowledge, skills, practices, experiences, customs, traditions, beliefs, attitudes, behaviours and dispositions; and teaching and assessment that utilises culturally preferred ways of learning." But as Cathcart (2005) concludes, teachers' ability to ask for help and be

open to new ideas is more important than being an expert in all these areas. Macfarlane, Christensen, Comerford, Martin and York (2010) support this conclusion, describing that it is important that teachers realise that they do not have to be of the same culture as their students in order to be effective, but it is important that they are able to 'connect' with their students' cultures and understand what it means to be gifted and talented in that culture.

Characteristics of Māori Giftedness and Talent

What should schools be trying to identify and how should they do this?
Bevan-Brown's (1993) research discovered that giftedness and talent for Māori is a broad, wide-ranging concept which is grounded in kaupapa Māori and in which many qualities and abilities are valued.   A list of these is provided and articles written by Bevan-Brown (2000, 2003, 2005a, 2005b, 2009, 2010, 2011) expand and build on these findings. Work by Jenkins (2002) and Mahaki and Mahaki (2007) also add to the literature describing the qualities and abilities valued by Māori. Both Bevan-Brown and Mahaki and Mahaki explain that the Māori concept of giftedness and talent is not bound by social class, economic status, lineage or gender and is holistic in nature. They also describe how in order for giftedness and talent to be recognised in Māoridom, the exceptional skills, abilities or qualities must be used to help others in some way (Bevan-Brown, 2005a; Mahaki & Mahaki, 2007). A fourth component that differentiates the Māori concept of giftedness and talent from the Pākeha concept is that the exceptional skills, abilities or qualities may be exhibited in both individual and/or group settings and that an individual's gifts and talents can be 'owned' by the group (Bevan-Brown, 2005a).

There are eight areas that are commonly valued in a Māori conception of giftedness and talent. These are āwhinatanga or manaakitanga, whānaungatanga, wairuatanga, kaitiakitanga, rangatiratanga, tikanga, te mahi rēhia and mātauranga (Bevan-Brown, 1993; Jenkins, 2002; Mahaki & Mahaki, 2007). Concepts similar to the areas of

āwhinatanga or manaakitanga, rangatiratanga, te mahi rēhia and mātauranga can also be contained in a Eurocentric conception of giftedness and talent as interpersonal skills, leadership abilities, physical, visual and performing arts abilities and academic abilities respectively. However, what is different about the Māori conceptions of these areas, as indicated above, is the way that Māori students who are gifted and talented are expected to use their exceptional abilities or qualities.

Appendix B combines the accumulated research and literature about the areas that are considered important components for Māori giftedness and talent and provides more information about the characteristics that may be observed when identifying Māori students who are (or have the potential to be) gifted and talented in these areas. It is important to note, however, that a child will not necessarily display all of the characteristics in the list; rather, the characteristics listed are indicators that a child may be gifted and talented in that area. As the Ministry of Education (2012a, p. 33) describes, "the gifted and talented are not a homogeneous group, and every student possesses a unique blend of traits. However, when we look at gifted and talented students as a group, we can see clusters of common characteristics."

Bevan-Brown (2009) explains that the identification of gifted and talented students falls under two main categories – the Culturally Responsive Environment Approach and the Data-Gathering Approach. In terms of identifying Māori students who are (or have the potential to be) gifted and talented, the Culturally Responsive Environment Approach is supported in articles and research by Bevan-Brown (1993, 2005b, 2009), Jenkins (2002), Jenkins, Macfarlane and Moltzen (2004), Macfarlane (2004), Mahuika (2007) and Webber (2011). When using this approach, students' gifts and talents are encouraged to 'surface' in an environment that is stimulating, challenging and where each student's culture is valued, affirmed and developed (Bevan-Brown, 2009). Identification takes place through observation of the child displaying their gifts and talents, however Bevan-Brown (1993) discusses in her research that this method of identification needs to be carried out by teachers who have a sound understanding and knowledge of Māori perspectives of giftedness and Māori culture and customs.

Unfortunately however, this does not seem to be happening, as Webber (2011, p. 229) notes,

> The continuing under-participation of Māori students in gifted and talented programmes suggests that those charged with identifying gifted students, often classroom educators with little or no expertise in gifted and talented education, might still be employing traditional notions of giftedness based on exceptional intellectual ability as a key criterion.

The second approach of gathering data is the more formal method of identifying students who may be gifted and talented which involves using a wide range of strategies and instruments such as observations, checklists, rating scales, standardised tests, portfolios, parent nomination, peer nomination and self-nomination to gather information about students' gifts and talents (Ministry of Education, 2012a). For Māori students, this means of identification is fraught with difficulty, as Bevan-Brown (2009) describes many of the strategies and instruments commonly utilised do not include a Māori conception of giftedness and talent. Cathcart (2005), Jenkins (2002), Keen (2005) and McKenzie (2001) support this finding, and note that many methods employed with the intention of identifying Māori students who are gifted and talented are culturally insensitive, focus on a narrow conception of giftedness and rely too heavily on information devised from Eurocentric tests. The Ministry of Education (2012a) notes, in their updated version of *Gifted and Talented Students: Meeting their Needs in New Zealand Schools,* that one of the principles of effective identification is to ensure that information to aid identification is gained from a multi-method approach which includes observation in a range of authentic contexts as well as discussions with students, rather than just from formal assessment tasks.

 Bevan-Brown (2009) notes that whatever method of identification is used, it is important that the student's rate of progress is also taken into account, as the extent and nature of the opportunities and encouragement learners have experienced has an

effect on whether their potential gifts and talents are obvious or not. It is just as important (if not more) to identify students who are potentially gifted and talented and Bevan-Brown (2009) urges teachers to look beyond the classroom, school and beyond any misbehaviour, an observation supported by the Ministry of Education (2012a), who note that it is important to recognise gifts and talent that may not be apparent in the classroom but may be more visible on the sports field, at church, on the marae, or at home.

Chapter Summary

Literature around gifted and talented education in Aotearoa New Zealand is a growing field; however literature with a specific focus on Māori is still limited. Much of the work relies on Bevan-Brown's (1993) original thesis which was carried out over a decade ago. However, as discussed in this review, even in Bevan-Brown's more recent works the issues that were examined in her thesis are still relevant today which belies a need for educators to take heed of these and for more research to be carried out to discover what the current situation in schools is for Māori students who are gifted and talented and how this can be further improved. Riley et al. (2004), Jenkins (2002), and the Education Review Office's (2008) studies go some way towards further uncovering the issues surrounding gifted and talented education for Māori students, however they do not focus specifically on the identification of these students and how teachers should go about this and again they are both at least half a decade old.

While Bevan-Brown's research and further works provide a foundation for understanding giftedness from a Māori perspective, and the works of Farthing, Irvine and Millar (2007), Jenkins (2002), Jenkins, Moltzen and Macfarlane (2004), Mahaki and Mahaki (2007) and Webber (2011) build on and add to this foundation, more research is necessary to discover and disseminate identification policies and procedures that are in use in schools and lead to the successful identification of Māori students who are gifted and talented.

Chapter Three: Research Procedures

Chapter Overview

This chapter outlines the research procedures used in this study. The study explored the practices mainstream state schools in one region of Aotearoa New Zealand use when identifying Māori students who are gifted and talented using survey research methodology and content analysis. A total of 45 schools were invited to take part and 11 schools agreed to participate. The research was accepted by the Massey University Ethics Committee as low-risk research.

Two data collection methods were employed. A representative from each participant school completed a questionnaire which focussed on numbers of Māori students identified as gifted and talented, identification procedures, community consultation and professional learning and development undertaken. Data from the questionnaires was recorded, coded and collated on a spreadsheet for analysis. Content analysis procedures were used to code, categorise and summarise data from the gifted and talented education policies and other documents used by schools such as checklists and nomination forms.

This chapter is divided into two parts; the first part describes the theory behind the components of research design pertinent to this study and the second part explains how this research was designed in relation to the literature.

Research Design in Theory

Survey Research

Overview

Survey research is a common research tool that can be used to gather both quantitative and qualitative information. Hartas (2010) notes that survey research designs are used extensively in educational research studies because they offer flexibility and adaptability. Survey research is defined by Creswell (2012, p. 376) as "procedures in quantitative research in which investigators administer a survey to a sample or to the entire population of people to describe the attitudes, opinions, behaviours, practices or characteristics of the population." Data is usually collected by introducing a number of related questions to a subsample which is representative of the population under study, using a survey instrument such as a questionnaire or interview schedule (Tuckman & Harper, 2012).

Most surveys possess three major features:

1. Information is collected from a group of people in order to describe some aspects or characteristics of the population of which that group is a part.

2. The information is gathered by asking each participant the same questions and the answers to these questions provided by respondents constitute the data of the study.

3. Data is collected from a sample, rather than from every member of the population.

(Fraenkel, Wallen, & Hyun, 2012; Tolich & Davidson, 2011)

There are two types of survey design: cross-sectional and longitudinal (Creswell, 2012; Fraenkel, Wallen, & Hyun, 2012). In a cross-sectional survey design, the data is collected at one point in time and can examine current attitudes, beliefs, opinions or

practices. A longitudinal survey design involves collecting data about changes in a cohort group, trends within a population, or changes in a group of the same individuals over time.

The subjects to be surveyed should be selected randomly from the population of interest in order to utilise the most rigorous form of sampling (Fraenkel, Wallen, & Hyun, 2012). Employing a procedure such as using a random numbers table is recommended by Creswell (2012) and Tuckman and Harper (2012). Fraenkel, Wallen and Hyun (2012, p. 402) warn that "individuals who possess the necessary information but are uninterested in the topic of the survey or do not see it as important, are unlikely to respond." That is why the identification of an appropriate sample in the first instance is crucial to gaining a high response rate. Once the sample has been defined, Creswell (2012) describes the process of survey research as having five steps:

- Locating or developing a questionnaire;

- Sending the questionnaire out to the sample of the population;

- Using repeated contacts with the sample to obtain a high response rate;

- Checking for potential bias in responses;

- Analysing the data.

Survey research is recommended as the method of choice when cross-population generalisability is a key concern as a range of educational contexts and subgroups can be sampled and the consistency of relationships can be examined across the various subgroups (Check & Schutt, 2012). Creswell (2012) also notes that survey research provides useful information in the evaluation of programmes and practices in schools which is the intention of this research.

Data Generating Instrument

In survey research, the data generating instrument is the survey or questionnaire itself. Creswell (2012) and Tuckman and Harper (2012) note that the questionnaire might be modified from an existing one, developed by the researcher or located and used from the literature. Tuckman and Harper (2012) recommend using or modifying an existing instrument that has already been proven to provide sound data. Particularly in the case of a mailed and self-administered survey, the appearance of the tool is crucial to the overall success of the study (Fraenkel, Wallen, & Hyun, 2012). Fraenkel, Wallen and Hyun (2012) recommend that the layout is attractive and not too long, as long questionnaires discourage people from completing and returning them. They also recommend that the questions are as easy to answer as possible and are not ambiguous. When preparing questionnaire items, it is important that the critical relationship between the items and the study's operationally defined variables is maintained. Tuckman and Harper (2012) encourage researchers to constantly check that the items fit with what the study aims to measure.

Creswell (2012); Fraenkel, Wallen and Hyun (2012); and Tuckman and Harper (2012) all point out that the nature of the questions and the way they are asked are extremely important when carrying out survey research not only to encourage the sample to complete and return the instrument, but to ensure that data that is gathered is useful and what the study intended to measure. Fraenkel, Wallen and Hyun (2012) explain that most surveys consist mainly of closed-ended questions which allow a respondent to select their answer from a number of options (also called multiple-choice). These types of questions are useful because all participants can answer the question using the response options provided and therefore are easy to use, score, and code for analysis on a computer. However, there is a disadvantage to closed-ended questions too, in that the respondent's answer may not be provided as an option. In order to counteract this issue, Creswell (2012) suggests combining this form of question with an open-ended question offering respondents a chance to provide their own answer.

Open-ended questions allow the researcher to probe deeper and participants to supply their own responses to questions (Tuckman & Harper, 2012). Open-ended questions are ideal when the researcher does not know what the possible answers might be and does not want to set constraints on the responses. Neuman (2000) notes that these types of questions also allow participants to provide responses within their cultural and social experiences, instead of the researcher's experiences. The disadvantage however, of using open-ended questions is that they can be difficult to interpret, code and analyse since so many different kinds of answers may be received (Fraenkel, Wallen, & Hyun, 2012). Creswell (2012) and Fraenkel, Wallen and Hyun (2012) recommend using a combination of closed and open questions, and even combining the two to allow respondents to write in answers that may not fit with the response choices supplied. This provides the respondents with limited open-ended information to encourage responses, but does not overburden the researcher with information that needs to be coded (Creswell, 2012).

Creswell (2012) and Tuckman and Harper (2012) recommend pilot testing surveys after their initial development to ensure that the questionnaire items achieve the desired qualities of measurement and discrimination. A pilot test enables the researcher to make changes to the instrument, based on feedback from a small number of individuals who complete and evaluate the instrument (Creswell, 2012). Because this group has provided feedback on the questionnaire, they are excluded from the final sample for the study.

Distribution of Questionnaire

Data collection in survey research may be done in four ways: in person; by mail; by telephone or online. Hartas (2010) indicates that web-based surveys are becoming popular as they can gather extensive data quickly, employ tested forms and sample questions rather than requiring the researcher to design them, and can take advantage of the extensive use of the internet to allow researchers to access a geographically dispersed population at a reasonable cost. Researchers must be aware however, that

web-based surveys may be biased towards certain demographics as well as other issues such as non-random sampling, technological problems and security issues (Creswell, 2012). Hartas (2010) also warns that the respondents' identity and frame of reference cannot be ascertained, which raises concerns about identity fraud and the relevance of the respondents' characteristics and attributes to the survey and overall research purpose.

Creswell (2012) points towards mailed surveys as being a convenient way to reach a sample of a population that covers a wide geographic area and facilitates quick data collection, often enabling the conclusion of data collection in as little as 6 weeks. A mailed survey or questionnaire is a form of data collection used in survey research in which the researcher posts a questionnaire to members of the sample. Tuckman and Harper (2012) specify that the initial mailing of a questionnaire to a sample of respondents should include a cover letter, the questionnaire, and a stamped, return addressed envelope. The cover letter is a critical part of contact, as it must briefly make the case for participation and must establish the legitimacy of the study and the respectability of the researcher (Tuckman & Harper, 2012).

Data Analysis

The data analysis procedures undertaken need to reflect the research questions which the study aims to address (Creswell, 2012). For example, Creswell (2012) and Check and Schutt (2012) describe that analysis in qualitative research usually consists of noting response rates, checking for response bias, conducting descriptive analysis of all items, and then answering descriptive questions. Analysis procedures for quantitative means typically involve the following steps: assigning unique identifying numbers to each form; reviewing the forms; coding open-ended questions; creating a codebook; entering the data; checking data for errors; using statistics to describe distribution and variation of variables; record and summarise data in tables and graphs (Check & Schutt, 2012). In survey research, data analysis aims to summarise the responses in order to draw some conclusions from the results. Cohen, Manion and Morrison (2011)

note that this involves organising, accounting for and explaining the data gathered as well as recording patterns, themes, categories and regularities. It is also important that the total size of the sample and the overall percentage of respondents are recorded as well as the total sample responding to each item (Fraenkel, Wallen, & Hyun, 2012).

Check and Schutt (2012) believe that identifying and refining important concepts is a key part of the data analysis process in qualitative research. Examining the relationships between these concepts allows the researcher to move from the simple description to explanations of how different concepts are connected or possibly what causes are linked with what effects (Check & Schutt, 2012).

Advantages, Disadvantages and Limitations of Survey Research
There are many advantages and disadvantages of survey research and these must be weighed up when deciding on a methodology. Tuckman and Harper (2012) cite quick data collection, the ability to reach geographically disperse samples and the economical nature of survey research as being advantages of this research design. As noted above, the whole process of data collection in survey research may take as little as 6 weeks. Creswell (2012) also explains other advantages of survey research are that it can usually be accomplished by one researcher and mailed or online surveys in particular allow respondents to take sufficient time to give well thoughtout answers to the questions asked.

However, Tuckman and Harper (2012) list three major problems that are presented when requiring research participants to self-report through a survey. These are that respondents must co-operate to complete the survey; respondents must tell what *is* rather than what they think should be or what they think the researcher wants to hear; and they must know and understand what the researcher is requiring in order to be able to report it. It is important when preparing surveys that researchers constantly

consider the extent questions might: influence respondents to show themselves in a good light; influence respondents to attempt to anticipate what researchers want to hear or learn; ask for information that respondents may not know themselves.

Another issue with mail surveys especially, is that since there is no direct contact with the respondents, there is often a low level of commitment to complete the survey, and thus low response rates (Hartas, 2010). This can lead to response bias in the results, which can limit the quality of the data.

Tuckman and Harper (2012) warn that the validity of survey items is limited by these considerations. However, even when an alternative is available, often simply asking subjects to respond may be (and often is) the most efficient method (Tuckman & Harper, 2012). "Thus, the advantages and disadvantages of a questionnaire as a source of data must be considered in each specific case before a decision can be made to use it or not use it." (Tuckman & Harper, 2012, p. 245).

Content Analysis

Overview

Fraenkel, Wallen and Hyun (2012) describe that much of human activity is not directly observable or measureable, nor is it always possible to get information from people. Content analysis involves gathering data in an indirect way, through the analysis of various types of communication. Although content analysis usually refers to the analysis of written communication or documents, it can also be used to analyse artefacts such as pottery, weapons, pictures and songs (Fraenkel, Wallen, & Hyun, 2012). Cohen, Manion and Morrison (2011) describe content analysis as taking texts and analysing, reducing and interrogating them into summary form by using both pre-existing categories established by the researcher and themes that emerge during the analysis in order to generate or test a theory. The categories and themes are applied through a systematic, replicable, observable and rule-governed form of analysis.

Data Gathering Instrument

In content analysis, the data gathering instruments are the texts to be analysed as these provide the data through the coding and categorising of the elements of the texts. Fraenkel, Wallen and Hyun (2012) note that researchers must be careful to locate texts that are relevant to the objectives of the study. The relationship between the content to be analysed and the objectives of the study should be clear. This may be ensured by careful selection of a body of material in which the specific research question or questions can be investigated (Fraenkel, Wallen, & Hyun, 2012). Cohen, Manion and Morrison (2011) also note when gathering documents for analysis it is important to be aware of the context the document was generated in, for example: who was involved; who was present; where the documents come from; how the material was recorded and/or edited; whether the data are accurately reported; the authenticity and credibility of the documents; and the selection and evaluation of the evidence contained in the documents.

Data Analysis

The method used in content analysis usually involves recording how often certain words or concepts are used, who does the most talking, or how communication content changes as the people involved in the communication change (Shuker, 2003). Cohen, Manion and Morrison (2011) and Fraenkel, Wallen and Hyun (2012) describe seven steps to be taken when undertaking content analysis:

- Construct the categories - It is important that the codes and categories that are constructed by the researcher are so explicit that another researcher could use them to examine the same material and obtain largely the same frequencies in each category. Categories are the main groupings of key features of the texts to be analysed and the researcher must decide how broad or narrow each category will be, along with how general the category will be.

- Specify the units of analysis – Define as precisely as possible what is to be analysed, whether it be specific words, phrases, sentences, paragraphs,

people or themes. Careful thought needs to go into the selection of the units of analysis to ensure that the data gathered will be useful in answering the research questions.

- Decide on the codes to be used – A code is a name or label that is given to a piece of text that contains an idea or a piece of information. The same code is given to pieces of text that say the same thing or are about the same thing. Coding enables the researcher to identify similar information and to search and retrieve the data in terms of those items that have been ascribed the same code. Decisions must be made about whether to code for existence and frequency and whether coding will be for precise words or those with a similar meaning.

- Conduct the categorising and coding of the data – Once the codes and categories have been decided, the analysis can be undertaken by ascribing the codes and categories to the text. Codes are used to describe specific textual elements and categories draw the codes together into a framework. To ensure reliability, it is recommended that the researcher first work on a small sample of text to test out the coding and categorisation and make amendments where necessary.

- Conduct the data analysis – This involves counting the frequency of each code in the text and the number of words which fit into each category. This is a process of retrieval. The implication here is that the frequency of words, codes, categories and themes provides an indication of their significance, but researchers must be aware of the importance of what is not included in the text also. Once frequencies have been calculated, statistical analysis can proceed using methods such as factor analysis, tabulation, crosstabulation, correlation, regression, structural equation modelling and dendrograms, however in some cases these types of statistical analyses are not appropriate so researchers must ensure the type of analysis they apply to the data is suitable for the type of data gathered.

- Summarise – The summary will identify key factors, issues, concepts and areas for subsequent investigation. This is an important stage as it points out major themes, issues and problems that have arisen from the data and suggests avenues for further investigation

- Make speculative inferences – This stage requires the researcher to make some explanations for the key elements and possibly their causes on the basis of the evidence gathered.

At its simplest level, content analysis involves counting concepts, words or occurences in documents and reporting them in tabular form which allows researchers to draw theoretical conclusions from texts.

Advantages, Disadvantages and Limitations of Content Analysis
Creswell (2012) notes that documents represent a useful source of data for a qualitative study. They are in the language and words of the participants and have usually been given thoughtful attention to, which is an advantage. Another advantage is that the logistics of content analysis are usually relatively straightforward and economical both in terms of time and resources compared to other research methods, particularly if the information is readily available (Fraenkel, Wallen, & Hyun, 2012). Creswell (2012) describes that documents are ready for analysis without the transcription that is necessary when using observational or interview data.

Cohen, Manion and Morrison (2011) note that the unobtrusive nature of content analysis is attractive, as information that may have been difficult or even impossible to obtain through direct means may be gained unobtrusively through the analysis of documents. Also attractive is the systematic and verifiable method of data gathering with its use of codes and categories and rules for analysis which are explicit, transparent and public (Cohen, Manion, & Morrison, 2011). Lastly, because the data

used in content analysis is readily available and can usually be returned to if necessary, Fraenkel, Wallen and Hyun (2012) note that this form of research permits replication of a study by other researchers.

A major disadvantage of content analysis lies in the fact that it is usually reliant on recorded information; therefore, variables which require the demonstration of behaviours or skills cannot be studied (Fraenkel, Wallen, & Hyun, 2012). Fraenkel, Wallen and Hyun (2012) note another disadvantage of content analysis is in establishing the validity and reliability of a study. The assumption is made in content analysis that different analysts can achieve agreement in categorising, but researchers must be careful that categories are clearly defined so that the research could be replicated to ensure reliability and validity.

The Sample

It is important that three terms are defined here: the population, the sampling frame, and the sample. At the broadest level, the population for a study is the group about which the researcher wants to gain information and draw conclusions (Creswell, 2012). As Cresswell (2012) clarifies though, researchers often identify a more specific level and do not always study an entire population but narrow the population down to a target population or sampling frame. The sampling frame is the actual list of sampling units from which the sample is selected, the sample being the actual participants in a study from which the researcher usually generalises to the target population.

From the target population, a number of possible respondents are selected through probabilistic sampling if large groups can be accessed or, more commonly, through non-probabilistic sampling (Fraenkel, Wallen, & Hyun, 2012). Probabilistic sampling requires a random selection to ensure that all participants have an equal chance of being chosen from the target population. Non-probabilistic sampling involves selecting participants who display a characteristic of interest, and who are available and

accessible. Davidson and Tolich (2003) describe that with qualitative research, the issue of 'representativeness' is not as important because there is no argument about whether the sample represents the population. Samples for this type of research can use non-probability techniques. Davidson and Tolich (2003) explain that non-probability sampling methods can be used in exploratory research where the aim is exploring attitudes, beliefs and practices of a particular sample, not generalising to a wider population.

Hartas (2010) describes two types of non-probability sampling methods – convenience sampling and purposive sampling. Convenience sampling involves selecting participants based on who is available and willing to take part in the research. Purposive sampling is a sampling technique that uses the purpose of the research to select participants. Decisions concerning who should be included in the sample are made by the researcher, based on a variety of criteria which may include specialist knowledge of the research topic, or as with convenience sampling, capacity and willingness to take part in the research. Davidson and Tolich (2003) state that some types of research necessitate this sampling approach because the researcher seeks to gather data from participants who are the most likely to contribute or those who are judged to be typical of the case of interest. Although convenience and purposive sampling methods cannot be considered representative of any population and are recommended to be avoided if at all possible (Fraenkel, Wallen & Hyun, 2012), it is also noted that often they are the only option available to the researcher (Check & Schutt, 2012; Davidson & Tolich, 2003; Fraenkel, Wallen, & Hyun, 2012; Hartas, 2010). Fraenkel, Wallen and Hyun (2012) advise when this is the case that the researcher should make sure they include information on demographic and other characteristics of the sample used in the study. They also recommend replicating the study with a number of similar samples to decrease the likelihood that the results obtained were simply a one-off occurence.

The size of the sample depends on the purpose and nature of the study and Hartas (2010) notes this should be determined from the outset. Qualitative studies tend to

include a smaller number of participants in order to collect in-depth and contextualised data; whereas, quantitative studies aim to involve as many participants as possible to allow the researcher to be confident the sample represents the population it is drawn from (Creswell, 2012; Hartas, 2010). The number of respondents required depends on the type of statistical analyses of the quantitative data and the scope of the survey research. It is quite common for survey response rates to be around 20-30 percent (Hartas, 2010), which means optimally five times more surveys will be sent out as are required to be returned. Fraenkel, Wallen and Hyun (2012) advise that decisions about sample size need to take into account the type of research to be carried out. They maintain that for descriptive studies, the minimum number of subjects recommended is 100. For correlational studies, in order to establish the existence of a relationship, a sample of at least 50 is deemed necessary. Lastly, for experimental and casual-comparative studies, Fraenkel, Wallen and Hyun (2012) recommend 15-30 participants.

Ethical Considerations

"It is a fundamental responsibility of every researcher to do all in their power to ensure that participants in a research study are protected from physical or psychological harm, discomfort, or danger that may arise due to research procedures." (Fraenkel, Wallen, & Hyun, 2012, p. 56) . Check and Schutt (2012) note that there are often fewer ethical issues with survey research designs as potential respondents can easily decline to participate. However, considerations do need to be made of the issues of confidentiality, informed consent, truthfulness and the minimising of harm (Cohen, Manion, & Morrison, 2011).

Anonymity and Confidentiality

The main ethical issues of concern when undertaking both survey research and content analysis are that of anonymity and confidentiality, Check and Schutt (2012) explain that this is due to the essential questions usually asked that may prove damaging to the subjects if their answers were disclosed. Hartas (2010) states all

participants in human research have the right to remain anonymous; this means that the information provided by participants should in no way reveal their identity and not even the researcher is able to identify the participant or subject from the information they have provided. In order to ensure anonymity, Hartas (2010) recommends two approaches. The principal means of ensuring anonymity is to assign subjects with a number and only use this to identify them. Secondly, Hartas (2010) recommends the grouping of data so that responses gained from individuals cannot be identified. However Check and Schutt (2012) and Cohen, Manion and Morrison (2011) believe that few surveys can provide true anonymity, where no information is recorded that could link respondents with their responses as often the combining of data uniquely identifies an individual or institution. Fraenkel, Wallen and Hyun (2012) express that confidentiality is more important that anonymity in survey research.

Confidentiality refers to the assurance that information gained from participants will not be disclosed in any way that might identify the respondent or that might enable the respondent to be traced (Cohen, Manion, & Morrison, 2011). Therefore although the researcher will know who has supplied the information and can identify participants from the information given, they will not make this connection known publicly or discuss respondents with anyone outside the research team. There are a number of techniques which can ensure confidentiality. Wherever possible, names or identifying aspects, such as logos, should be removed from all data collection forms (Tuckman & Harper, 2012). This can be done by assigning a number or letter to each respondent and coding documents accordingly. To ensure confidentiality participants must be assured that the names of individual subjects will never be used in any publications that describe the research (Fraenkel, Wallen, & Hyun, 2012). Creswell (2012) also explains that researchers need to be careful about reporting small subsets of results that could potentially disclose the identity of specific participants.

Informed Consent

In survey research where the data gathering instrument is mailed, informed consent is implied by participants completing and returning the questionnaire, so it is vital that the cover letter or introductory statement identifies the researcher and the motivation behind the study as well as supplying all the necessary information to enable the prospective participants to make an informed decision to take part (Check & Schutt, 2012). Information such as what the data will be used for, how it will be stored and how long it will be stored for need to be made explicit in the cover letter. Informed consent for content analysis where the documents are requested via mail also assumes informed consent is given when participants supply the documents requested. Just as for survey research, the letter requesting documents needs to clearly set out all necessary information about the documents required, the intentions of the study, how the data gathered will be used, how the documents received will be stored and how long for. Cohen, Manion and Morrison (2011) point out that the decision to take part in the research must be entirely that of the participants, there may be encouragement from the researcher, but not coercion. Participants must also be able to withdraw from the study at any point and request that their data not be used. In terms of completing a questionnaire, participants must also be allowed to complete only the items they feel comfortable with.

Truthfulness

Fraenkel, Wallen and Hyun (2012) state that wherever possible, researchers should conduct studies using methods that are open and honest. They warn that if deception is used people may begin to think of scientists and researchers as liars or individuals who misrepresent their intentions and fewer and fewer people would be willing to participate in research investigations. As a result, the search for reliable understanding about our world may be obstructed. Therefore as with the process for obtaining informed consent, the intentions and procedures that the participants are informed of in the initial stages must be those that the researcher follows and any changes that arise during the research must be communicated to the participants.

Truthfulness in research also relates to researchers disclosing their methods and being honest in the presentation of their findings (Check & Schutt, 2012). In order for readers to be able to assess the validity of research conclusions and the ethics of the procedures undertaken, there needs to be truthful disclosure of how the research was conducted. This means a detailed methodology section must be included in research reports as well as appendices containing the research instruments (Check & Schutt, 2012).

Minimising of Harm

As described above, every researcher has the fundamental responsibility of ensuring that participants in a research study are not harmed in any way from having taken part in their study. Fraenkel, Wallen and Hyun (2012) note that fortunately in educational research the activities involved are usually within the customary, usual procedures of schools or other agencies and involve little or no risk to participants. Researchers should still however, carefully consider whether there is any likelihood of risk be it physical, psychological, emotional or cultural and ensure that the impacts of this risk are minimised. Fraenkel, Wallen and Hyun (2012, p. 56) recommend considering three questions about the harm posed before undertaking any study. These are:

1. Could people be harmed in any way during the study?

2. If so, could the study be conducted in another way to find out what the researcher wants to know?

3. Is the information that may be obtained from this study so important that it warrants possible harm to the participants?

The steps undertaken in ensuring anonymity or confidentiality, informed consent and truthfulness are all intended to minimise the risk of harm to participants. Check and Schutt (2012, p. 62) recommend that research ethics should be based on "a realistic assessment of the overall potential for harm and benefit to research subjects."

Validity and Reliability

In any research, validity and reliability are important considerations; however as Cohen, Manion, and Morrison (2011) note it is virtually impossible for research to be completely valid and reliable hence at best the aim is to minimise invalidity and unreliability and maximise validity and reliability. Fraenkel, Wallen and Hyun (2012) define reliability as referring to the consistency of the results obtained from one administration of an instrument to another or from one set of items to another and validity as "referring to the appropriateness, correctness, meaningfulness, and usefulness of the specific inferences researchers make based on the data they collect." (p.151). Therefore the reliability of results invloves the effectiveness of the instrument used to obtain them and validity is used to describe the degree to which the evidence gathered from the instrument supports the inferences made by a researcher about the meaning of the results.

Cohen, Manion and Morrison (2011) describe that when assessing the validity and reliability of postal questionnaires there are two central concerns: firstly, whether respondents who return completed questionnaires do so accurately, honestly and correctly; secondly, whether non-respondents would have given the same distribution of answers as did the respondents. The issue of non-response can be checked on and controlled for to an extent, by contacting non-respondents and interviewing them then comparing the replies of respondents and non-respondents (Cohen, Manion, & Morrison, 2011). However, the likelihood of non-respondents agreeing to be interviewed on the subject when they have not completed the survey in the first instance seems slim. Check and Schutt (2012) suggest reliability can be increased by maximising the response rate using several strategies such as: including stamped self-addressed envelopes; multiple rounds of follow-up contact to request returns; stressing the importance and benefits of the questionnaire; providing interim data from returns to non-respondents to involve and engage them in the research; checking addresses and changing them if necessary.

Reliability and validity in content analysis rely both on the texts to be analysed and the consistency of the inferences that the researcher makes from the texts. Cohen, Manion and Morrison (2011) state that there are many issues that need to be addressed in order to maximise reliability and validity of data gained through content analysis. These are:

- The use of evidence which the researcher can infer from the text may not be what was intended by the author.

- The purpose for which the text was written may be different to what the researcher intends to use it for.

- The classification of text may be inconsistent due to human error, coder variability and ambiguity in coding rules.

- Words in the texts may be ambiguous or polyvalent.

- Coding and categorising may lose the intended richness of specific words and their connotations.

- The definition of categories and themes may be ambiguous because they are inferential.

- Categories may reflect the researcher's agenda and more meaning may be imposed on the text than was intended by the producers of the text.

- Words included in the same category may have different connotations or have more or less significance in that category.

- A document may intentionally exclude a topic, overstate or understate an issue.

In order to address these issues as much information about the development of the texts and their intention needs to be gathered and considered while analysing the texts. The research report must include information about the context in which the

documents were developed in order to prove the validity and reliability of the data gathered and the inferences made.

The information presented through this section was then used to develop the research design in practice. The procedures undertaken are described in the next section and related to the theory underpinning them.

Research Design in Practice

Survey Research

Overview

This research utilised the survey research approach and content analysis to discover the practices mainstream state schools in one region of Aotearoa New Zealand are using when identifying Māori students who are gifted and talented. The aim of conducting the survey was to gather information about the practices schools are using and to use the information gained to find relationships between school type, school size, ratio of Māori pupils, amount of Professional Learning and Development undertaken and other variables to find commonalities in schools which have practices in place that are culturally appropriate and effective. This process was undertaken with the hope of finding schools with exemplary practice which could be shared through the research report in order to provide examples of how Māori students who are gifted and talented can be effectively identified.

Cross-sectional survey design was used to collect data at one point in time to examine the practices used to identify Māori gifted and talented students. This method is advocated by Creswell (2012) as being the most popular form of survey design in education as it measures current attitudes or practices.

Data Generating Instrument

A questionnaire (see Appendix A) was developed as the predominant data generating instrument, based on the questionnaire developed by Riley et al. (2004) to gather information from the sample. The questionnaire consisted of mainly closed-ended questions; however some questions were a combination of closed and open-ended questions to ensure that respondents were able to answer if their response was not provided as recommended by Creswell (2012) and Fraenkel, Wallen and Hyun (2012).

The questionnaire consisted of 11 questions in total and was made up of four sections:

- School information – Participants were asked to provide information about their school such as ethnic composition, decile and roll number.

- Co-ordination/Responsibility – Participants were asked two questions about who is responsible for identifying and maintaining records for Māori students who are gifted and talented.

- Definition and Identification – Participants were asked six questions about their schools' definition and identification procedures, including whether any staff had taken part in professional learning and development in this area.

- Written Policies and Procedures – Participants were asked whether the identification of Māori students who are gifted and talented was specifically addressed in their policies and/or procedures and whether whānau were involved in developing these.

An open-ended question was also provided at the end, asking for any other comments participants would like to make.

The categories used in the questions about the areas of ability included in schools' definitions of giftedness and talent where those suggested by the Ministry of Education (2012a) and the areas of ability related to a Māori conception of giftedness and talent where those suggested in the works of Bevan-Brown (1993, 2009), Jenkins (2002) and Mahaki and Mahaki (2007).

A pilot test was carried out on a school that was not used in the study and this led to an extra question being added about how schools address or plan to address any challenges or barriers they face when identifying Māori students who are gifted and talented.

Distribution of Questionnaire

The four ways that data collection may be carried out in survey research were considered, and it was deemed most practical and efficient to use a mail-based questionnaire for this study. The main reason for this decision was that schools were required to provide copies of documents and it was felt this would be most likely to be done if they could photocopy and post them to the researcher. The use of an online tool such as Survey Monkey was considered, but the practicality of this when schools were required to provide the researcher with copies of their policies and other documents used in the identification of students meant that this was not a viable option. Therefore prospective participant schools were contacted via post with a covering letter (see Appendix A) explaining the purpose of the research and participant rights, along with the survey. A postage-paid, addressed envelope was included so that schools could return their completed survey along with copies of the requested documents.

The packages were addressed to the named school principal as it was hoped that this may lead to more completions than if they were just addressed to schools. However on reflection after receiving such a low response rate, it may have been worthwhile to take the time to phone each school before posting out the survey package and establish who the person in charge of gifted and talented education was and addressing it to this person, whether it was the principal or another teacher. A procedure for following up after posing out the survey packages was established and this is described in the section addressing the disadvantages of survey research below.

How the Disadvantages of Survey Research were Addressed

The main disadvantage of survey research as discussed in the theory section above is that questionnaires often have a poor completion rate. Unfortunately, that issue rang true in this study. Check and Schutt (2012) indicate that in order for a survey to provide data representative of the sample, a response rate of 70% or higher is desirable. Getting a return rate of this size proved impossible in the time allowed for

this study. The initial post out of forty-five questionnaires only yielded one returned and completed. Therefore the method of encouraging schools to participate suggested by Check and Schutt (2012) was followed. After a follow up email on the due date, three more questionnaires were returned completed. A second follow up email a week later and call to principals who had not responded either with a completed survey or declined to participate resulted in a further six surveys being completed and returned, a final late completion lead to a sample of 11 schools. Creswell (2012) notes that gaining responses from mailed questionnaires is often difficult as the individuals lack any personal investment in the study and I believe this could have been part of the reason for the poor response rate. The other issue was the timing of mail out: many of the principals I was able to contact by phone wanted to complete the questionnaire but did not have time due to report writing and checking and other end of term commitments. Several principals commented that they had received up to five similar surveys on various topics from post-graduate students in the same week as mine which could also have been a factor in the completion rate.

Fortunately as the aim of this study was not to gain data to generalise findings to the population, the small response rate does not affect the validity of the research. However, I would not recommend using this methodology if the aim of the research required a sample that was representative of a population in order to be able to generalise the results.

The other two issues, ensuring factual and accurate responses, identified by Tuckman and Harper (2012) were addressed in various ways. In order to encourage respondents to report on what is, rather than what they think should be, the questions were fact based rather than asking for opinion and the request of documents enabled claims made in the survey to be verified in most cases by cross-referencing with the documents. The second issue of ensuring respondents know and understand what the research is requiring was attempted to be addressed by requesting that the questionnaire be filled in by the person who has responsibility for gifted and talented

education in each school. It was deemed that this person should have some understanding of this area and be familiar with the terms used in the questionnaire. Respondents were also encouraged through the cover letter to approach the researcher with any questions prior to completing the questionnaire, although none took up this offer.

Data Analysis

As the completed questionnaires were returned, the forms were reviewed and responses were coded and entered into a Microsoft Excel spreadsheet which was set up to enable different characteristics to be isolated and compared. For closed-ended questions each possible response was coded (e.g. Yes = 1, No = 2) and entered in number form and responses to open-ended questions were entered verbatim. This provided raw data in an accessible and easy to interpret format. Initial data analysis involved recording frequencies of the quantitative data in order to identify key characteristics shared by schools. Responses to open-ended questions were analysed for patterns, regularities and discrepancies and assessed in conjunction with the quantitative data provided by the closed-ended questions, enabling the identification of links and relationships between qualitative and quantitative data. The data was then recorded in the results chapter either as a narrative description or in tabular form in order to provide answers to the research questions.

Content Analysis

Overview

As a researcher, I deemed that just gathering data via the questionnaire was not going to be enough to provide a clear picture of the practices occurring in schools in regards to the identification of Māori students who are gifted and talented. The other way data was gathered was through the analysis of documents such as school's policies, procedures and identification checklists. The documents were analysed to find the definitions of giftedness and talent that each school used and whether these definitions included characteristics of Māori conceptions of giftedness and talent.

They were also analysed as to the components of a Māori conception of giftedness and talent that were included and the identification methods that were recommended.

Data Gathering Instrument

Copies of the respondents' documents used when identifying Māori students who are gifted and talented were requested, however the documents provided by schools varied. Three respondents did not provide any documents, two provided just their gifted and talented education policy, four provided their policy and identification checklist, one provided their identification checklist and parent nomination form and one provided a range of policy and procedure statements related to Māori and/or gifted and talented education. On further reflection it would also have been relevant to ask respondents for the information Cohen, Manion and Morrison (2011) suggest about who was involved in the development of the documents and how the evidence contained in the documents was selected and evaluated. Although a question was asked in the survey about whether the schools' Māori communities had been consulted in the development of their gifted and talented policy documents, none of the schools indicated the level of involvement that the Māori community had in the development of their policies.

Data Analysis

The steps of analysis recommended by Cohen, Manion and Morrison (2011) and Fraenkel, Wallen and Hyun (2012) offered a basis for the process followed in the analysis of the documents provided by the respondents. The first step involved constructing the categories that would be analysed. These are the key features of the texts that are to be identified. These were to be the general areas of ability included in the definitions, the areas of ability from a Māori perspective included in the definitions, the characteristics valued in a Māori conception of giftedness and talent included in the checklists provided and the components of a Māori conception of giftedness and talent included in the documents.

The second step was specifying the units of analysis – these were taken from the literature. The areas of ability that may be included in schools' definitions of giftedness and talent were taken from Riley et al (2004) and the areas of ability, characteristics and components of a Māori conception of giftedness and talent were taken from Bevan-Brown (2009) and Mahaki and Mahaki (2007). Because the areas of ability, characteristics and components were named using specific words in the literature, the researcher decided to accept synonyms of these concepts in the analysis. English translations of the Māori words used were also accepted as it was important to establish whether the concepts were included at all. Step two involves deciding on the codes to be used, these and the synonyms and translations found in the documents are displayed in Table 2 and Table 3 on the following pages.

Table 2: Synonyms for General Areas of Ability Included in Definitions

Areas of Ability in Definition	Code	Synonyms found in documents
Intellectual/Academic	I/A	General or specific academic aptitude Logical-mathematical Linguistic
Creativity	C	Creative and/or productive thinking
Expression through Visual Arts	VA	The arts Spatial Visual and/or performing arts
Expression through Performing Arts	PA	The arts Musical Bodily kineasthetic Visual and/or performing arts
Social	SO	Inter-personal abilities A sense of community Social responsibility Social skills Social awareness and action
Leadership	L	Inter-personal abilities including leadership Leadership skills Leadership ability
Culture Specific Abilities and/or Qualities	CAQ	Keen sense of humour and intellectual playfulness Cultural traditions and values Cultural values and ethics
Expression through Physical Abilities/Sport	PA/S	Physical Ability Sport and physical ability
Spiritual	SP	Existentialist
Emotional	E	Intra-personal abilities
Other	O	Environmental sensitivity Naturalistic Commitment Environmental action Technological ability E-learning

Table 3: Synonyms or Translations for Māori Areas of Ability Included in Definitions

Areas of Ability in Definition	Code	Synonyms or Translations in Documents
Awhinatanga/Manaakitanga	A/M	Social responsibility Inter-personal abilities Social awareness and action
Whānaungatanga	Wh	A sense of community
Wairuatanga	Wa	Existentialist
Kaitiakitanga	K	Environmental sensitivity Naturalistic ability Environmental action
Rangatiratanga	R	Inter-personal skills including leadership Leadership/social skills Leadership ability
Tikanga	Ti	Cultural traditions and values Cultural values and ethics Cultural traditions and ethics
Te Mahi Rehia	TMR	Physical ability Visual arts Performing arts Bodily kineasthetic Spatial Musical Visual and/or performing arts Physical ability Sport and physical ability The arts
Mātauranga	M	General or specific academic ability Logical-mathematical Linguistic Creative and/or productive thinking

Step three in the process of analysing the documents involved conducting the categorising and coding of the data. Each document was annotated as to the categories that it contained firstly, and then the codes were ascribed to individual words or phrases that related to the units of analysis. Once each document was coded and categorised, the frequency that each category and code occurred was recorded on a table along with the synonyms and translations that were accepted, this makes up step four of the process. Finally the data was summarised, this involved pointing out what was not found as well as what was and making speculative inferences about what the key elements and their possible causes.

How the Disadvantages of Content Analysis were Addressed

The reliance of content analysis on recorded information is described by Fraenkel, Wallen and Hyun (2012) as a major disadvantage of the methodology. This potential weakness was addressed by using content analysis in conjunction with survey research in order to gain both anecdotal evidence and documented evidence of the practices that are used in schools to identify Māori students who are gifted and talented. This mixed method approach meant that data gathered from the survey could be cross-referenced with the documents and vice versa to ensure a full picture could be gained.

The other disadvantage noted by Fraenkel, Wallen and Hyun (2012) of the validity and reliability of such a study was dealt with through ensuring that the categorising and coding of the documents was very transparent and clearly defined so that the categorising and coding of documents could be replicated by following the description of the method used in this study.

The Sample

The population for this study was initially all mainstream state-funded schools in the one district of Aotearoa New Zealand as this was the group that the researcher initially set out to gain data from and draw conclusions about. This decision was made in order to gain a wide range of data to be able to answer the research questions and all 45 mainstream state-funded schools in the region were invited to take part in the research. This is both a purposive and convenience sample, as the decision was made by the researcher about who should be included in the sample and only schools in the specified district were selected as this is the area of interest to the researcher. The sample is also purposive as the actual representation of schools would not be known until after the questionnaires were completed, therefore only consisting of participants who had the capacity and willingness to take part in the research.

The sampling frame was constructed by using the Ministry of Education (2012) listing of schools in the chosen district. From this directory only the schools that fitted the selection criteria (mainstream and fully state funded) were selected from the list. The decision to include all year levels was made to provide a variety of practices and to enable the researcher to compare practices between different types of schools – primary and secondary for example. Unfortunately no secondary schools completed the survey so the actual sample consisted of seven contributing primary (Years 1-6) schools and four full primary (Years 1-8) schools.

The size of the sample was dictated by the number of schools who were invited to take part that were willing to complete and return the survey and copies of their school documents related to the identification of gifted and talented students. As this was a qualitative, descriptive study, although a larger sample would have provided more data for description and comparison, the small sample size did not detract from the reliability or validity of the study. The recommendation made by Fraenkel, Wallen and Hyun (2012) that the demographic information of the sample is included was taken into account in order to demonstrate that due to the small sample size the data cannot be considered representative of the population.

Ethical Considerations

This research was recorded on the low-risk database by Massey University Human Ethics Committee, meaning it was deemed to contain a minimal level of possible harm, no more than would be normally encountered in daily life.

Anonymity and Confidentiality

Participation in this survey was confidential, rather than anonymous because to ensure anonymity would have been virtually impossible when schools were supplying the researcher with school documents and demographic information. Due to the small sampling frame, even schools that did not provide documents could be easily

identified by the researcher by using their demographic information. It was also decided that it would be useful to know which school had completed each survey so that schools who had not replied could be followed up and in case there were further questions the researcher needed to ask or anything that needed clarifying on the completed surveys. Confidentiality was assured by school names or identifying logos being removed from documents on receipt and a code applied to the documents so they did not get mixed up but at the same time could not be identified by anyone else. For example, the survey and all documents belonging to School A had an A written on the top right hand corner. Individual schools were not identified by name in the research report nor will be in any further publications resulting from this research. Codes assigned to schools were used sparingly in the results and most results were reported with schools grouped together and compared this way in order to ensure confidentiality.

Informed Consent

The purpose, method and use of the research data were explained to prospective participants in the covering letter (see Appendix A) that was supplied with the survey. Participants were also given the opportunity to contact the researcher prior to completing the survey if they had any further questions and to withdraw from the study at any point, however none of the participants took up either offer. It was made clear in the covering letter that informed consent was implied by returning the completed survey and requested documents. Participants were also given assurance in the introduction to the survey that they were able to omit answering any items they did not feel comfortable with. Due to the format of the study, participants could easily choose not to take part in the research by not completing the survey; therefore there was no risk of consent being coerced.

Truthfulness

The intentions and procedures to be used in the undertaking of this research were clearly described in the cover letter and also in this research report, therefore providing a truthful communication to both the participants and readers. The methodology section is detailed and appendices are included that contain the research instruments so that participants and readers can be assured that the study was conducted ethically and the research findings and conclusions are valid and reliable.

Minimising of Harm

Although the topic is a sensitive one and some schools may have felt threatened if they did not have policies or procedures in place to identify Māori students who were gifted and talented, the approach that the researcher took meant that this was not the aim of the research. The measures taken to ensure confidentiality mean that schools are not identified in the research report.

Validity and Reliability

The results presented in the following chapter are based on a small scale survey of 11 schools' self-reports of their identification methods and practice in relation to Māori students who are gifted and talented. Evidence about their school definitions and identification methods of giftedness and talent were also gained from analysis of the documents provided by the respondents in order to improve reliability, but these did not always include the required information.

Potential issues that could compromise validity and reliability in this particular study include:

- the sample size cannot be determined before the commencement of the research;

- the methodology chosen typically has a low response rate;

- the requirement of participants to self-report the numbers of Māori students identified as gifted and talented and the processes and practices used to obtain these numbers. If this data is not recorded or communicated clearly it could potentially be unreliable;

- the survey requesting information about Māori students identified as gifted and talented from only the last 12 months;

- the returned surveys and documents may not represent the target population;

- the research relies on the professional understanding of the researcher and the participants regarding the identification of Māori students who are gifted and talented;

- participants involved may only want to portray positive features or aspects they wish the researcher to report on rather than providing a full picture;

- participants may choose not to supply the requested documents, which would limit the data that can be gained about definitions and methods of identification.

Most of these limitations are addressed through establishing that the aim of the study is not to generalise the findings but to determine what is happening in the sample schools in terms of identifying Māori students who are gifted and talented. The focus on sharing positive aspects of practice also eliminates many of the issues identified above. By using information gained through the questionnaire as well as through the analysis of documents, the reliability of the data is improved. The validity of the inferences made as to the meaning of the results is also supported by using two research methods to gather data. Another method of ensuring that the results and inferences are valid was employing categories suggested by the research about Māori definitions and characteristics of giftedness and talent (Bevan-Brown, 1993, 2009; Mahaki & Mahaki, 2007) when recording data from the documents.

An issue that does pose an unfortunate limitation however is that in drawing from a survey that had already been created for a similar means, the data gathered about the numbers of Māori students who had been identified in the schools was limited to those that had been identified in the last 12 months. While collating the results the realisation was made that this places severe limitations on the conclusions that can be drawn about the practices of the schools involved. On reflection, more precise data could have been gathered if the 12 month time frame had been left out.

Chapter Summary

Survey research and content analysis were selected as the methods of research for this study. These two methods allowed the researcher to gather data from a sample of 11 primary schools in one region about the practices they currently use when identifying gifted and talented students who are Māori. Both these methods have advantages and disadvantages and the disadvantages of these methods were addressed and limitations explained in order to be clear about the intention, reliability and validity of results obtained from this study. Although no research can be completely valid and reliable, all reasonable measures were taken to ensure that validity and reliability were maximised.

Chapter Four: Results

Chapter Overview

This chapter presents the results of the survey sent out to 45 schools and the analysis of the documents provided by the schools who responded. Eleven out of the forty-five schools responded with a complete survey and eight of the eleven included copies of the documents their school uses when identifying gifted and talented students. All 11 schools that responded were primary or full primary so this eliminated secondary, intermediate, composite and area schools from the possible sample, leaving a total of 36 primary schools that could have taken part in the research. Thus, the sample represents approximately a third of primary schools in the sample region.

The returned surveys and documents provided a small range of results that offer an insight into how mainstream primary schools go about identifying Māori students who are gifted and talented and some characteristics that have an effect on this process. The results were collated from the data gathered in the survey, as well as analysis of the documents provided, and will be presented according to the research question they are related to.

Respondent Information

Table 4, on the following page, details the demographics of the respondent schools, showing who completed the survey and the documents each school provided. Most surveys (72%) were completed by the principals of the respondent schools. As the table shows, eight schools provided documents with their completed surveys. Three schools (B, F and I) provided copies of their Gifted and Talented Education policy plus their identification checklist and one school provided a copy of their identification checklist and parent nomination form (K). The remaining four schools supplied copies of their Gifted and Talented Education policy and other various policies as recorded below.

Table 4: Sample Information

SCHOOL	Years	Decile	Roll	Location	Ethnic Composition (%)			Bilingual	Immersion	Survey completed by	Documents Provided
					Māori	Pākehā	Other				
A	1-8	5	12	Rural	17	33	50	No	No	Principal	-Curric delivery policy -T.O.W. policy -T.O.W. procedure -CWSA procedure
B	1-6	9	116	Rural	3	75	22	No	No	Principal	-Gifted and Talented Implementation Plan -ID checklist -Overview of Characteristics
C	1-6	4	507	Urban	40	55	5	No	No	Principal	NIL
D	1-8	9	224	Rural	19	81	0	No	No	Principal	-Special Abilities policy
E	1-8	7	260	Rural	14	76	10	No	No	Principal	NIL
F	1-6	2	285	Urban	75	20	5	No	No	Principal	-Gifted and Talented Education policy -ID checklist
G	1-6	4	413	Urban	37	60	3	No	No	Deputy Principal/ TiC of Gifted Education	-Gifted and Talented Education policy -Māori Learning Dimensions
H	1-6	5	383	Urban	32	61	7	No	No	Principal	-Gifted and Talented Education policy
I	1-8	2	117	Urban	73	19	4	No	No	Principal and Deputy Principal	-Gifted and Talented Education policy including checklist
J	1-6	2	235	Urban	70	23	7	Yes (year 5-6)	No	Teacher interested in GATE	NIL
K	1-6	4	235	Rural	40	50	10	No	No	Principal	-ID Checklist -Parent ID form

The respondents in the sample were comprised of seven contributing primary schools (Years 1-6) and four full primary schools (Years 1-8) representing 38% of the district's contributing primary schools and 22% of full primary schools. With just over 60% of primary schools in the district being between deciles one and five, there is a slight over-representation of lower decile schools in the research sample, with eight of the eleven schools (73%) being ranked decile five and below. Nearly a third of primary schools in the district have rolls of less than 100 students (30.5%), but only one of these schools responded to the survey, with the majority of survey respondents being in schools of 200 or more students. Not surprisingly, this is also evidenced in the lower response rate of rural schools, with only five of the district's 23 rural primary schools responding. Using a sample such as this that is not representative of the target population could provide skewed results, so it is important to note that the aim, as described in Chapter One, is to explore the practices that are in use.

Table 5: Sample Demographics Compared to District

		Sample	District
Year Levels	Years 1-6	7	18
	Years 1-8	4	18
Decile	1	0	4
	2	3	8
	3	0	1
	4	3	6
	5	2	3
	6	0	2
	7	1	4
	8	0	1
	9	2	7
	10	0	0
Roll Size	0-100	1	11
	101-200	2	9
	201-300	5	12
	301-400	1	1
	401-500	1	2
	501-600	1	1
Location	Rural	5	23
	Urban	6	13

Question One: Current Identification Practices

There are three parts to the results for the question: What are the current practices used when identifying Māori students who are gifted and talented in mainstream schools in one region of Aotearoa New Zealand? These are:

1. The areas of giftedness and talent included in schools' definitions and checklists;
2. The methods of identification recommended for use by schools' policy and/or procedure documents;
3. The numbers of Māori students who have been identified in the last 12 months, the areas of giftedness and talent that identification was in and methods used to identify the students.

Definition of Giftedness and Talent

Firstly, the research set out to discover the aspects of giftedness and talent that schools included in their definition and whether the components presented in the literature as valued by Māori were included. Although nine respondents indicated in the survey that they have a school-wide definition of giftedness and talent, only six of the eleven respondents provided their definition of giftedness and talent, all of which were gathered through the document analysis. All of the definitions gathered indicated that gifted and talented students were those who demonstrated outstanding ability relative to their peers and five of the schools' definitions recognised that potential ability was also an important factor. Two of the six schools did not indicate any particular features or characteristics of giftedness and talent in their definitions. One of these schools used the generic definition from the Ministry of Education (2002) document, *Initiatives for Gifted and Talented Learners* and the other had a very general description. However, both these schools provided Identification Checklists that broke down specific characteristics they look for when identifying gifted and talented students.

As Table 6 shows, four of the schools who provided definitions which indicated areas of potential giftedness and talent placed value on social and intellectual giftedness and talent and the areas of the arts. Spiritual abilities and qualities was included in one schools' definition of giftedness and talent and emotional abilities and qualities was included in two schools' definitions of giftedness and talent. There were various other abilities included in the definitions provided, most commonly naturalistic and linguistic abilities which were included by the three schools that used Gardner's Multiple Intelligences model as their definition of what constitutes giftedness and talent.

Table 6: General Areas of Ability Included in Definitions

Areas of Actual or Potential Ability	Number of schools with reference to each ability in their definition	
Intellectual/Academic	4	
Creativity	2	
Expression through Visual Arts	4	
Expression through Performing Arts	4	
Social	4	
Leadership	3	
Culture Specific Abilities and/or Qualities	3	
Expression through Physical Abilities/Sport	3	
Spiritual	1	
Emotional	2	
Other	Naturalistic ability	2
	Linguistic ability	2
	Environmental sensitivity/action	2
	Task commitment	1
	E Learning	1
	Technological ability	1

Table 7, below, demonstrates that areas of ability valued in a Māori conception of giftedness and talent were included in some schools' definitions. Only four of the six schools that provided definitions (Schools B, D, F and H) included some of the areas of ability valued by Māori in their definition. Kaitiakitanga, Te Mahi Rehia and Mātauranga were the most common areas of ability that were recognised and all of the four schools that referred to the areas of ability valued in a Māori conception of giftedness and talent used English terms in their documents.

Table 7: Areas of Ability of Māori Conception of Giftedness Included in Definitions

(Please note: the characteristics were not termed exactly as they are here, synonyms or English translations were used.)

Areas of Actual or Potential Ability	Description	Number of schools with reference to ability in their definition
Āwhinatanga / Manaakitanga	Generosity – honouring, caring and giving mana to others, helping and assisting	3
Whānaungatanga	Family values – relationships	1
Wairuatanga	Balance – harmony, spirituality, being grounded, calm	1
Kaitiakitanga	Care taker/guardian of knowledge, environment and resources	4
Rangatiratanga	Leadership that inspires unity. Includes three different types of leaders – up front style, leadership-by-example, and the background leader	3
Tikanga	Knowledge of approved etiquette, correct behaviour in situations	3
Te Mahi Rehia	Recreational pursuits – Physical and artistic performance	4
Mātauranga	Knowledge – intellect, thinking skills, wisdom, education	4

An example of a definition which includes reference to cultural aspects of giftedness and talent is from School B:

"At [School B] Gifted and Talented students are those who demonstrate exceptional performance and flair, or have potential outstanding ability relative to their peers. This may be recognised in one or more of the following areas: creativity; intra-personal abilities; inter-personal abilities including leadership; the arts; a sense of community; general or specific academic aptitude; social responsibility; environmental sensitivity; keen sense of humour and intellectual playfulness; cultural traditions and values; physical ability."

The characteristics that were listed in the checklists provided by five schools were also analysed for their inclusion of Māori concepts of giftedness and talent. The results of this analysis were interesting as the characteristics were heavily skewed towards characteristics that represent mātauranga as Table 8 shows. School G's checklist was aimed specifically at identifying Māori students who are gifted and talented and used Mahaki and Mahaki's (2007) Dimensions of Māori giftedness, this checklist omitted wairuatanga though.

Table 8: Characteristics of Māori Conception of Giftedness and Talent Included in Checklists

Areas of Ability	Indicators (from Mahaki & Mahaki, 2007)	Relevant Indicators found in Documents
Āwhinatanga/ Manaakitanga	A student gifted in āwhinatanga or manaakitanga may: -exhibit the capacity and natural inclination to respond, nurture, and care for others; -have integrity and mana; -have a sense of occasion; be welcoming; demonstrate hospitality; -show generosity of spirit; be giving and understand the importance of, and demonstrate, reciprocity; -be strong in tautoko qualities (support; value that one person's success is the success of the group). -have a well developed sense of altruism and be selfless in service to others.	SCHOOL B -Sensitivity -Service to community SCHOOL F -Exhibits manaakitanga -Shows sensitivity to things causing distress -Great concern with fairness SCHOOL G Used Mahaki and Mahaki's indicators as recorded on the left. SCHOOL K -is socially mature and communicates well with peers -is sensitive to others, empathetic and helps others to solve their problems -has a strong sense of justice

Whānaungatanga	A student gifted in whānaungatanga may: -form, strengthen and maintain bonds with peers; -value and promote loyalty and inclusiveness; -be a role model, team player, and connect well with others; -demonstrate an awareness of relationships and positions; -be aware of their responsibility, especially in relationship to others; -be strong in tautoko (support; value that one person's success is the success of the group). -have a keen interest in and in-depth knowledge of their particular iwi or hapū including their history, whakapapa, tikanga, dialect and whakataukī.	SCHOOL B -Intra-personal – strong sense of self and identity SCHOOL G Used Mahaki and Mahaki's indicators as recorded on the left.
Wairuatanga	A student gifted in wairuatanga may: -have the ability to 'read' the wairua of an environment or event and to respond appropriately; -have the ability to nourish and restore their wairua; -be a sensitive and reflective thinker; -have a heart of humility which is open and giving; -appear 'absent-minded' or introspective but can be incredibly insightful on occasion (not always on prescribed occasions); -have a broad knowledge of Māori mythology and able to interpret myth messages in a contemporary context.	SCHOOL B Moral and ethical concerns
Kaitiakitanga	A student gifted in kaitiakitanga may: -have a very strong awareness of global issues and responsibility; -recognise that human welfare and care for the environment are inextricably linked; -be internally driven with a passion; -be perceptive – aware of the need to nurture and maintain knowledge, environment and resources for the short term and long term future; -demonstrate that need comes before self; -be a gifted storyteller: have an excellent memory, knowledge of and pride in linking whakapapa, iwi, geography; -have a broad knowledge of Māori, iwi and hapū history and tikanga; -have an in-depth knowledge of traditional healing principles and practices.	SCHOOL G Used Mahaki and Mahaki's indicators as recorded on the left.

Rangatiratanga	A student gifted in rangatiratanga may: -have mana amongst their peers; -be visionary and strategic thinkers: their opinions are sought, valued and considered; -stand up for beliefs and values sometimes against adversity; -inspire and motivate others to work for the common good; -show initiative and motivation; see beyond the obvious to recognise what needs to be done; -often have the mandate from the group as the spokesperson; can reflect and present controversial ideas with respect; -have a high level of respect for and affinity with kaumātua.	SCHOOL F -Likes leadership roles -Tends to direct activity -Chosen by other students in groups/teams SCHOOL G Used Mahaki and Mahaki's indicators as recorded on the left. SCHOOL K -Actively seeks leadership in class and school situations or other cultural contexts -Will lead behind the scenes and is uncomfortable with an 'up front' role -has positive self esteem and stands firm on beliefs and values
Tikanga	A student gifted in tikanga may: -communicate in te reo Māori clearly, fluently and flexibly using a variety of advanced language structures and figures of speech; -demonstrate initiative and appropriate behaviour before, during and after events; -have knowledge of protocols, customs and rituals that demonstrate and reinforce values and beliefs; -maintain, direct and guide others in appropriate tikanga; -transfer and appropriately adapt tikanga to a variety of situations and environments.	SCHOOL F -Fluent in Te Reo SCHOOL G Used Mahaki and Mahaki's indicators as recorded on the left. SCHOOL K -is an orator, confidently holding an audience, saying the right things at the right time
Te Mahi Rēhia	A student gifted in te mahi rēhia demonstrates ihi, wehi and wana (linking appropriate knowledge of whakapapa and iwi to the occasion) and advanced practical and creative ability in one or more of the following: -visual arts including raranga (weaving), tukutuku, whakairo (carving), kowhaiwhai; -music performance and composition; -performing arts: waiata, haka, karakia, mau rakau, toi whakaari (drama), whai korero (oratory skills), karanga, poi; -sports and physical pursuits (including Māori games, pastimes and practices such as taiaha expertise).	SCHOOL G Used Mahaki and Mahaki's indicators as recorded on the left.
Mātauranga	A student gifted in mātauranga may: -have intrinsic motivation and persistence to seek and acquire knowledge; -have advanced thinking skills; thinks critically and creatively; -have effective use of knowledge and intellect; -learn quickly and transfer knowledge into new contexts;	SCHOOL B -Memory and processing -'Quickly grasps new concepts and makes connections, senses deeper meanings' -'Intense passion, curiosity and in-depth knowledge about one or more things.'

-problem find, solve and analyse; -be intuitive and visionary; -be acknowledged and sought after for their expertise; -share knowledge wisely and with discretion; -have a highly developed memory; -demonstrate ability in language skills e.g. oral storytelling – excellent memory, knowledge of and pride in whakapapa, iwi, geography, and can make links.	SCHOOL F -Early reader -Excellent memory -Interested in books -Advanced maths skills -Advanced reading skills -Highly motivated -Advanced vocabulary -Excited about new learning/ideas -Learns basic skills quickly with little repetition -Retains information easily -Tells stories/events in great detail -Loves being read to. Follows story closely SCHOOL G Used Mahaki and Mahaki's indicators as recorded on the left. SCHOOL I -has exceptional reasoning skills -learns as a fast pace and understands their learning -has a particular interest and this is constantly pursued for further knowledge -can present high order thinking questions -can be an avid reader -excels in a learning area or areas -has an excellent memory SCHOOL K - thinks logically and analytically -understands ideas and concepts quickly -is capable of making links and seeing patterns between and within concepts -enjoys the challenge of an intellectual problem, striving for accurate solutions -is curious and asks questions that show a depth of thought unusual amongst peers -is an avid reader -finishes work quickly or easily bored by routine tasks and as a consequence can become disruptive -is reluctant to practice known tasks

A Māori definition of giftedness and talent goes beyond just the characteristics that are valued, Bevan-Brown's (1993) *Components of a Māori Concept of Giftedness* were also used to analyse the respondents' provided documents. Table 9, below, shows that all the definitions recognised broad and wide-ranging areas of giftedness and talent and five of the seven schools placed importance on both qualities and abilities but the other components of a Māori definition of giftedness and talent were not mentioned specifically in the schools' definitions of giftedness and talent. Apart from the school who had used Mahaki and Mahaki's (2007) indicators, the characteristics described in the schools' identification checklists did not correlate with the indication in the schools' definitions that broad and wide-ranging areas of giftedness and talent where recognised as the characteristics included strongly favoured mātauranga or intellectual abilities and qualities.

Table 9: Components of a Māori Concept of Giftedness and Talent

Components of Giftedness	*Number of schools with reference to or demonstrating component in definition (n=7)*	*Number of schools with reference to or demonstrating component in identification checklists (n=5)*
Giftedness widely distributed. Not bound by social class, economic status or gender	0	0
The areas of giftedness and talent recognised are broad and wide-ranging	7	1
Importance is placed on both qualities and abilities	5	5
The concept of ability is holistic in nature and inextricably intertwined with other Māori concepts	0	1
There is an inherent expectation that a person's gifts and talents will be used to benefit others	0	1
The Māori culture provides a firm foundation on which special abilities are grounded, nurtured, exhibited and developed	0	1
Mana tāngata is frequently accorded to people with special abilities especially in the areas of traditional knowledge and service to others	0	0

Methods of Identification

There are two parts to the results for this section – responses to questions asked in the survey and analysis of the documents provided by the respondents.

Four schools had recently identified gifted and talented students in only three areas: intellectual/academic, leadership and physical abilities/sport. The practices (described in the survey) that respondents had used to identify students who are academically gifted and talented were similar across the various year levels and across the four schools that had recently identified students. Academic data were used by all four schools, teacher observation by two and peer nomination by one. "Interactions with peers and teachers" were also mentioned by one respondent. Teacher observation and peer nomination were the methods used to identify the students who were gifted and talented in the areas of leadership and physical abilities/sport.

The methods of identification that were mentioned in the school documents (policies, procedures and checklists) provided by the respondents were also very similar. None of the documents specifically mentioned the identification of Māori students so it is assumed that these methods would be used when identifying all students - both Māori and non-Māori. Of the eleven schools, three did not provide any documents and three provided documents but identification methods were not mentioned in them. Of the remaining five schools, two recommended multi-categorical methods of identification, two did not mention methods of identification in their policies but included identification checklists which indicate this is a method they would recommend. The final school suggested that developing culturally responsive environments enabled gifted and talented students to be identified.

The three schools that indicated a multi-categorical method was to be used all reported a similar range of methods of identification in the documents they provided. These were:

- Evaluation of student products
- Parent/whānau nomination
- Teacher checklists
- Self-evaluation
- Standardised assessment
- Teacher observation/intuition
- Peer nomination

Two schools indicated that they specifically addressed the identification of Māori students within their policies and/or procedures. However, on analysis of the documents, for one school the only reference that could perhaps be addressing Māori was including 'cultural traditions and values' as an area of possible giftedness and talent. The other school indicated in their policy that "in our setting [we need to be aware of abilities] in particular in Te Reo Māori". This school acknowledged that the identification of Māori students was "only slightly" addressed in their documents.

Five of the eleven respondent schools had consulted with their Māori communities about their Gifted and Talented policies and/or procedures. This was mostly done through meetings and surveys, but the level of involvement the parents/whānau had in developing the policies and/or procedures was not indicated. For example, one school explained that parents "were asked if they wanted to be involved, some participated in questionnaires/surveys". Another responding school provided information about the nature of involvement: "In a sense they were keen for their child to be extended but they were more keen for behaviour support".

Numbers of Māori Students Identified

Of the eleven respondents, four schools had identified at least one Māori student as being gifted and talented in the past 12 months. Nine Māori students, out of a population of 1120 Māori students enrolled at the respondent schools, were identified as gifted and talented in the last 12 months: six students were identified as being gifted and talented in the area of intellectual/academic ability, one in the area of leadership and two in physical abilities and sport. The students identified in the area of intellectual/academic ability were in Years 1, 4-6, 7 and three in Year 8. The student gifted and talented in leadership was Year 4-6 and the students identified as gifted and talented in physical abilities and sport were Year 4-6 and Year 5. These results show that 0.8% of the Māori student population across these 11 primary schools had been formally identified as gifted and talented in the last 12 months.

Table 10: Numbers of Māori Students Identified

School	Decile	Total Roll	Total Number of Māori students	Total Māori students identified as gifted and talented in last 12 months	Percentage of Māori students
D	9	224	43	1	2.3%
E	7	260	36	4	11.1%
G	4	413	153	3	2.0%
K	4	235	94	1	1.1%

Question Two: Effective Practice

All respondents indicated that approaches that work for identifying any gifted and talented student work similarly for Māori students. They found that teacher intuition and observation, as well as peer nomination and parent/whānau nominations were effective and believe it is important to have knowledge of the child as an individual as well as of their whānau background.

School F found that providing opportunities for students to demonstrate their abilities as well as encouraging and supporting them to become involved and step up to the challenge were strategies that worked when identifying Māori students who are gifted and talented.

School J used Boswell's (2008) template for Recognising Māori Giftedness in Schools. This template was adapted from Mahaki and Mahaki's (2007) work and is included in Appendix B as it is a useful tool. However, Boswell (2008) warns that this template was developed for use in one particular school so it needs to be used in consultation with local iwi or significant members of the local Māori community to ensure that the characteristics included in the template are those that are valued by the Māori community of the school. The original template developed by Boswell (2008) does not include the component of Wairuatanga which is included in Mahaki and Mahaki's (2007) work. This aspect is considered an important one by Bevan-Brown (2009), Jenkins (2002) and Mahaki and Mahaki (2007) so this has been added into the template included in Appendix B.

Question Three: Barriers and Challenges

Out of the 11 schools, two schools indicated they did not experience any barriers or challenges in identifying Māori students who are gifted and talented and one school did not respond to this question, although none of these three schools had identified any Māori students as being gifted and talented in the last 12 months.

Of the remaining eight schools, three identified lack of teacher expertise and understanding of indicators of Māori giftedness and two identified lack of parental support as barriers and/or challenges. Others noted challenges such as:

- Reluctance of children to participate
- Peer pressure

- Identification of talent beyond academic ability
- Student behaviour
- Lack of school-wide focus on this area
- Teacher availability for extra support.

One school indicated that they do not perceive giftedness and talent to be ethnically delineated, and any challenges and barriers that exist, exist for the gifted and talented population as a whole. This was one of the schools that had identified a Māori student as being gifted and talented in an academic area.

Four of the eleven schools are working towards addressing their teacher expertise in the area of gifted and talented education in general. Three indicated that this was an area of focus for them over the next few years. These schools are in the process of developing identification procedures and gaining understanding and knowledge of the best way to acknowledge Māori learners. One of these schools in particular will have a major focus on gifted and talented education for Māori students, as their principal has been awarded an international research fellowship which will focus on the cultural differentiation of gifted programmes related to both cultural minorities and indigenous populations. The principal of this school described that this would "provide a solid base to review our existing ID processes and programmes we run within our small group of schools".

Question Four: Professional Learning and Development

Only one school had undertaken Professional Learning and Development (PLD) that involved Māori giftedness and talent, and the identification of Māori students who are gifted and talented was addressed in this PLD. This school had not identified any Māori students with gifts and talents in the last 12 months, however the school only had two Maori students enrolled. The schools who had identified students over the last 12 months had not undertaken any recent PLD in this area, nor had the schools

with a high proportion of Māori students. Three schools indicated that they had either a current or future intention to focus on the area of gifted and talented Māori students and in particular up skilling their teachers in being able to recognise and cater for these students.

Chapter Summary

The results of the survey and document analysis show that in the last 12 months four schools have identified Māori students who are gifted and talented. Many schools recommend using a variety of methods to identify students who are gifted and talented in a range of abilities and qualities and one school had acknowledged the importance of a culturally responsive environment to facilitating identification. Teacher knowledge and expertise in the area of Māori giftedness and talent was the main identified barrier to identification of students however only one school had undertaken professional learning and development in this area. The next chapter will discuss these results and relate the findings to the literature.

Chapter Five: Discussion

Chapter Overview

This chapter offers a discussion of the results presented in Chapter Four and relates the results to the literature reviewed in Chapter Two. Relationships between results will be explored and commonalities examined in order to identify and explain the effects different variables may have on schools' identification of Māori students who are gifted and talented.

Current Identification Practices

Definitions of Giftedness and Talent

Six of the eleven schools provided documents which included their school's definition of giftedness and talent. All of these definitions were in line with the Ministry of Education's (2012a) recommendation for a definition that goes beyond academic ability. However, the student data provided painted a different picture, as was displayed in the Results chapter, with six of the nine students who had been identified in the last 12 months demonstrating giftedness and talent in academic ability, one in leadership and two in sport/physical ability. The respondents noted many reasons for this; however the main reason cited was that teachers were not confident in how to identify aspects of giftedness and talent beyond academic ability. One of the limitations of this study, unfortunately, is that we do not know if these schools have Māori students that they have identified as gifted and talented prior to the last 12 months and what areas these students are gifted in.

Of the six schools that provided definitions, three specifically mentioned culture-specific abilities and/or qualities as an area of giftedness and talent and one further school included a document which explicitly described what these might be for Māori using Mahaki and Mahaki's (2007) descriptors.

The schools that included characteristics that are valued in a Māori conception of giftedness and talent in their definition had no similarities in decile, percentage of Māori students, roll number or location and had not had recent Professional Learning and Development in this area. Five out of the eleven schools had consulted with their Māori community when developing their definition and none of the schools had identified any students as demonstrating giftedness and talent in culture-specific abilities and/or qualities in the last 12 months.

These results are similar to the Education Review Office's (2008) finding that the majority of schools they studied had not adequately taken into account Māori concepts of giftedness and talent in their definition. They also found that of these schools, most had not consulted with their community to help them understand and incorporate these concepts. A further finding from both Riley et al.'s 2004 study and ERO's 2008 study that still seems to be the case currently is that, even if Māori beliefs and perspectives were included in definitions, there is little practical application of these in identification, programmes or strategies for delivery. Bevan-Brown (1993) and Mahaki and Mahaki (2007) advise that consultation with schools' Māori community is vital when defining culture specific giftedness and talent as Māori cannot be treated as a homogenous group. Although they present lists of the areas of ability and characteristics generally recognised as being valued in a Māori conception of giftedness and talent, schools must consult with their particular Māori community in order to ensure that the qualities and areas of ability that they value are reflected in schools' definitions of culture specific giftedness and talent.

On analysis of the checklists provided by five respondents, there were more references to characteristics that are valued in a Māori conception of giftedness and talent than were apparent in the definitions, with characteristics of Mātauranga being by far the most commonly mentioned. Again this raises the issue that although the definition of giftedness and talent recommended by the literature (Bevan-Brown, 2009) is broad

and wide-ranging, intellectual or academic giftedness and talent still seem to be the most commonly recognised.

Methods of Identification

The identification methods detailed in the policies, procedures and documents provided by the respondents were broad rather than directive and the three schools that specified particular methods to be employed recommended a similar multi-method approach as recommended in the Ministry of Education (2012a) publication, *Gifted and Talented Students: Meeting Their Needs in New Zealand Schools*.

One school mentioned the importance of a culturally responsive environment in facilitating identification which the literature about Māori gifted and talented students strongly promotes as being vitally important in facilitating identification (Bevan-Brown, 1993; Bevan-Brown, 2005a; Bevan-Brown, 2005b; Cathcart, 2005; Jenkins, Moltzen, & Macfarlane, 2004; Mahaki & Mahaki, 2007; Riley et al, 2004; Webber, 2011). The school that included reference to the importance of a culturally responsive environment was one with a high proportion of Māori students (75%), however not one that had recently identified any Māori students as being gifted and talented.

Number of Māori Students Identified

Interestingly, the four schools that had identified gifted Māori students in the last 12 months were not the schools with the highest proportion of Māori students in their total population, nor was the school that had recently taken part in Professional Learning and Development in this area. The four schools that had identified students had 14%, 19%, 37% and 40% Māori students. The school with 19% Maori students was decile 9, the school with 14% was decile 7 and the schools with 37% and 40% Māori were decile 4.

Further research also needs to be carried out to discover the numbers of Māori students identified as gifted and talented enrolled in the school, rather than specifically identified in the last 12 months. The results from this further enquiry need to be compared to the number of non-Māori students that have been identified as gifted and talented to discover whether there is a statistically significant difference between the number of Maori and Pakeha children being identified relative to the number of these two groups on the total school roll. The Ministry of Education (2012a) points out that students from economically disadvantaged backgrounds can be difficult to identify as gifted and talented as well, so this could also be a reason why the low decile schools (who had high proportions of Māori students) had not identified any Māori students as gifted and talented in the last 12 months, although it does not explain why the other high decile schools in the sample had not identified any Māori students who are gifted and talented in the last 12 months. Two of the remaining schools that were not low decile and had not identified any Māori gifted and talented students had very low numbers of Māori students – one had two students and one had three students.

Effective Practice

The findings of this research demonstrate that teachers believe that the same approaches work well for Māori children and Pākehā children but the numbers show that they do not. The numbers of Māori students being identified indicates that the methods being employed may not be working for Māori students, although further enquiry needs to be undertaken to determine if the schools had more Māori students who had been identified as gifted and talented prior to the last 12 months. Bevan-Brown (2009) warns that when employing methods of identification such as teacher observation it is important that teachers are aware of their own cultural perspectives, for example, humour is influenced by cultural beliefs and understandings. So although teachers may believe approaches that work for Pākehā children will work when attempting to identify Māori children as gifted and talented, the cultural perspective they are operating from may be hindering the identification process.

The Ministry of Education (2012a) and Bevan-Brown (2009) support the finding that parent and/or whānau nomination may be particularly useful when identifying students whose cultural identity differs from that of the teacher. The Ministry of Education (2012a) warns, however, that it is important that genuinely trusting reciprocal relationships exist between the home and school in order for whānau to feel comfortable in sharing their children's strengths. Bevan-Brown (2009) also notes that it is valuable to include kaumātua and kōhanga reo kaiako in the identification process.

The other identification method found to be effective by participants in the research - peer nomination - is supported in other research (Bevan-Brown, 1993; Jenkins, 2002). However, the Ministry of Education (2012a) points out that it is important students are given guidance to consider key areas, behaviours and values that are relevant to different cultural and ethnic groups and focus on specific traits related to giftedness rather than simply nominate their friends. Bevan-Brown (2009) adds that it is unlikely that peer nomination will be effective in an environment that is not culturally responsive. Peer nomination is effective when students have a trusting relationship with their teachers and feel that their culture is valued.

The literature maintains that a culturally responsive environment provides the best means for gifts and talents to be displayed and identified (Bevan-Brown, 2005b; Bevan-Brown, 2009; Jenkins, 2002; Jenkins, Moltzen, & Macfarlane, 2004; Riley et al., 2004). Without such an environment, recognising and identifying gifts and talents beyond academic ability becomes far trickier. Teachers do not have to be Māori to be able to provide this environment, but they do need support and professional development if they have limited Māori cultural knowledge. The Ministry of Education's (2008) Māori Education Strategy *Ka Hikitia – Managing for Success,* requires educators to encourage Māori to succeed as Māori and employ the Māori Potential Approach, which advocates shifting the focus from addressing problems and disparities to expanding on successes and investing in strengths, opportunities and potential. This approach sits well with gifted and talented education and encourages

teachers to look beyond traditional Eurocentric identification methods and to connect with whānau and the wider community and engage learners, parents, whānau, iwi, Māori educators, providers and enterprises in the identification and provision for Māori students who are gifted and talented (Ministry of Education, 2008).

Barriers and Challenges

The main barrier and challenge reported by the respondents in this research is that of teacher expertise and knowledge. This issue is mentioned widely in the literature (Bevan-Brown, 2009; Cathcart, 2005; Education Review Office, 2008; Farthing, Irvine, & Millar, 2007; Mahaki & Mahaki, 2007; Riley et al., 2004; Rymarczyk Hyde, 2010) Riley et al. (2004) found that as well as this, there were many reasons for the under-identification of minority groups in gifted education, the reasons that were described by the respondents were all included in Riley et al.'s list as presented in Figure 1 below.

Figure 1: Problems Associated with the Identification of Culturally Diverse Student

Points in italics were described by respondents:

- Low teacher expectation
- Teacher bias
- Low teacher referral rate
- *Inadequate teacher preparation in testing, assessment, multicultural and gifted education*
- *Cross-cultural misinterpretations and misunderstandings*
- Inadequate home-school communication about gifted education opportunities
- *Narrow concept of giftedness*
- Negative stereotyping of minority group children
- Characteristics associated with cultural diversity that may obscure giftedness
- *Reluctance amongst parents of children from diverse minority cultures to identify their children as gifted and nominate them for gifted programmes*
- *Children unmotivated to perform in test situations*
- Children inhibited by conditions of poverty or psychological stress
- Geographic isolation
- The pervasive deficit orientation in society and educational institutions

(Riley, Bevan-Brown, Bicknell, Carroll-Lind, & Kearney, 2004, p. 25)

But as Cathcart (2005) describes, teachers' willingness to ask for help and be open to new ideas is more important than being an expert in this area. Macfarlane, Christensen, Comerford, Martin and York (2010) support this conclusion, describing that it is important that teachers realise that they do not have to be of the same culture as their students in order to be effective, but it is important that they are able to 'connect' with their students' cultures and understand what it means to be gifted and talented in that culture. Bevan-Brown (2005b) believes that teachers who value and support cultural diversity in general and Māori culture in particular are an essential ingredient of a culturally responsive environment. Her research (Bevan-Brown, 1993) shows that having a teacher they relate well to and respect is often a critical factor in determining whether gifted potential of Māori students is realised or not.

Other issues such as reluctance of children to take part and peer pressure could also be solved by creating a culturally responsive environment where the students feel that their culture is valued and do not feel singled out. The case study undertaken by Jenkins (2002) describes how in the school she studied, where there was a very strong culturally responsive environment, the special abilities of individual students or groups of students was readily acknowledged, nurtured and celebrated by peers. The participants in the study contended that such peer acknowledgement would not be likely in contexts where recognition or demonstration of gifts and talents may result in students being embarrassed and/or separated from the group by way of withdrawal programmes. Again the importance of being culturally responsive arises.

Professional Learning and Development

The significance of specific pre-service training, and continued in-service professional development and learning (PLD) in improving teachers' confidence and ability to identify and provide for their Māori students who are gifted and talented as well as better understand these students' cultural background, is identified in the literature

(Bevan-Brown, 1993, 2005b; Cathcart, 2005; McKenzie, 2001). In relation to PLD, The Education Review Office (2008, p. 54) in their review of gifted education, made the recommendations that school leaders should "promote ongoing participation in school-wide professional development, and specialist training and development for people specifically responsible for gifted and talented education" and that the Ministry of Education should "provide targeted, high quality professional development to rural and low decile schools on providing for gifted and talented students".

When I discussed this finding with a principal at one of the respondent schools she said although they would love to do some PLD in this area, with all the other requirements of getting to grips with the new New Zealand Curriculum released in 2007 and the expectations for the implementation of National Standards, released in 2009, have meant that PLD for aspects such as gifted and talented education have fallen by the wayside as teachers do not have the time to do everything. The Education Review Office (2008) found that ongoing professional development in gifted and talented education was essential to good practice, especially in the face of competing professional development priorities, to ensure that teachers' skills were kept updated. However, even with professional development, staff needed to have confidence and guidance to implement new strategies in their classrooms.

Another principal commented that finding PLD specific to gifted and talented education and Māori gifted and talented education in particular, had proved difficult. A solution to this issue, suggested by Riley and Rawlinson (2006), is that there is greater integration of gifted and talented education content, principles and strategies across a range of papers at both the undergraduate and postgraduate levels as well as in the professional development offered to practicing teachers, in addition to having specific gifted education courses. For example, professional development focused on improving outcomes for Māori students should provide teachers with knowledge and strategies for how to identify and cater for Māori students who are gifted and talented as well.

The Ministry of Education is in the beginning stages of implementing a new model of delivery for Professional Learning and Development. This model, entitled Student Achievement Function (SAF) aims to put individual school's needs at the centre of the provision of PLD by utilising SAF practitioners as brokers between PLD providers and schools. PLD providers are required to develop and provide PLD according to the needs identified by schools and SAF practitioners. Therefore if this is an area that schools are asking for PLD in, it is up to the providers to develop programmes which will meet schools' needs and enable teachers to develop confidence and competence in this area.

The Ministry has two contracts for provision of gifted and talented education professional learning and development in mainstream settings in place for 2012 and 2013. In the North Island, Te Toi Tupu is delivering intensive work with schools who have identified this is an area of need. They are also holding regional hui to build networks between schools and overseeing the TKI gifted and talented website. In the South Island, Te Tapuae o Rehua hold the contract and they are taking a different approach by targeting clusters of schools after undertaking a demographic analysis of high priority learners. P. Barnes, Ministry of Education (personal communication, October 1, 2012) notes that although the provision of professional learning and development in gifted and talented education is relatively new, both providers are seeing encouraging progress.

Te Puna Wananga, a department of the Faculty of Education at The University of Auckland holds a contract in the Northern and Waikato area to work with Māori medium settings to accelerate the achievement of all Māori students who are gifted and talented (T. Riley, personal communication, October 11, 2012). This provision uses a range of face-to-face approaches with schools and makes innovative use of e-learning through webcasting and online opportunities for interactive collaboration and sharing of processes and outcomes. The contract for gifted and talented professional learning and development in the South Island is held by one of the Te Toi Tupu

consortium partners, Tainui Endowed College for Research and Development (T. Riley, personal communication, October 11, 2012).

Chapter Summary

Although the schools' definitions of giftedness and talent and identification checklists included reference to culture-specific abilities and qualities, the identification processes and numbers of Māori students being identified as gifted and talented did not match up in most cases. This meant that Māori students that are or have the potential to be gifted and talented may not be experiencing the opportunities to allow their gifts and talents to be recognised and developed. The main reason cited for this was teacher knowledge, expertise and confidence in this area, however only one school had taken part in professional learning and development which involved the identification of Māori students who are gifted and talented. The literature reviewed strongly promotes the importance of a culturally responsive environment to the identification and development of Māori students who are or have the potential to be gifted and talented, but again this relies on teachers having the knowledge, support and confidence to create and maintain such environments.

This research established on a small scale that findings from Riley et al (2004) and the Education Review Office (2008) still seem to be apparent in schools today. Māori conceptions of giftedness need to be more clearly incorporated into schools' Gifted and Talented Education policies and procedures and teachers and school leaders need more support and professional learning and development to enable them to create culturally responsive environments so that Māori culture-specific abilities and qualities can be acknowledged, recognised and developed.

Chapter Six: Conclusion

Gifted and talented education is a vitally important aspect of education and meeting the needs of all gifted and talented students remains a major issue in Aotearoa New Zealand education, but is particularly an issue for students from diverse cultures. Culturally responsive gifted and talented education has the capacity to improve learning outcomes for all students from minority cultures as it requires teachers to concentrate on students' strengths rather than focusing on deficits. The objective of this research was to answer the following questions:

1. What are the current practices used when identifying Māori students who are gifted and talented in mainstream schools in one region of Aotearoa New Zealand?
2. What aspects of practice do these schools find enable them to effectively identify Māori students who are gifted and talented?
3. Do these schools experience any barriers and/or challenges when identifying Māori students who are gifted and talented? If so, what are these barriers and/or challenges and how have they been addressed?
4. How many schools have undertaken Professional Learning and Development (PLD) in the area of Māori giftedness and talent in the last three years? Is there a relationship between the amount of PLD undertaken and the cultural responsiveness of the schools' identification practices?

The results presented in this study are based on a small scale survey of 11 schools' self-reports of their identification methods and practice in relation to Māori students who are gifted and talented, as well as the amount of Professional Learning and Development schools had taken part in related to the identification of Māori students who are gifted and talented. Evidence about their school definitions and identification methods of giftedness and talent were also gained from analysis of the documents provided by the respondents.

Table 11, below, presents a summary of the thesis objectives and how these objectives have been met. These points are then further discussed.

Table 11: Achievement of Thesis Objectives

Thesis Objectives	*Key Findings which Demonstrate the Achievement of Thesis Objectives*
1. To establish the current practices used in a sample of mainstream schools when identifying Māori students who are gifted and talented.	Definitions and identification processes were shared by the respondents. Some of the definitions were culturally-inclusive and some of the identification practices were culturally-responsive. These practices were cross-referenced through analysis of the documents provided.
2. To identify the aspects of practice that the sample schools find enable them to effectively identify Māori students who are gifted and talented.	Although respondents shared aspects of practice which they felt enabled them to effectively identify Māori students who were gifted and talented, the small number of students identified suggests that these practices were not truly effective. More research needs to be conducted to test this assumption.
3. To explore the barriers and/or challenges that these schools experience when identifying Māori students who are gifted and talented and the ways these have been addressed.	The most common barrier or challenge facing schools when identifying Māori students who are gifted and talented is a lack of teacher expertise and knowledge in this area. Three schools were planning to address this issue through Professional Learning and Development in 2013.
4. To discover the impact Professional Learning and Development in the area of Māori giftedness and talent has had on the cultural responsiveness of the schools' identification processes and practices.	Only one school had undertaken Professional Learning and Development that touched on the identification of Māori students who are gifted and talented, but this school had not identified any Māori students in the last 12 months. Insufficient data was gathered to determine if any relationship existed between Professional Learning and Development and the cultural responsiveness of the schools' identification processes and practices.

Current Identification Practices

The current practices employed by the schools who agreed to take part in study were varied and ranged from a school who did not acknowledge a different approach needed to be taken when identifying Māori students who are gifted and talented to a school that recommended creating a culturally responsive environment in order to encourage Māori students who are gifted and talented to demonstrate their abilities. Four schools acknowledged that the identification of Māori students who are gifted and talented was an area they need to work on and three had made the commitment to do this in the next year.

Some aspects of a Māori conception of giftedness and talent were included in four schools' definitions of giftedness and talent however more aspects were apparent in the characteristics included in schools' identification checklists.   Three schools indicated in their policy documents that a multi-method approach to identification was recommended and this was seen in the methods used to identify the nine Māori students who had been formally recognised. In the last 12 months however, formal identification of Māori students had only occurred in a small range of areas – academic giftedness, leadership abilities and physical abilities. Therefore the conclusion can be made that in this sample, in the last 12 months, formal identification of Māori students who were gifted and talented was limited both in numbers and the areas of ability identified.

This research question was able to be answered about the sample schools with the data that was gathered and a snapshot of how schools go about identifying Māori students who are gifted and talented was provided. However due to the small sample that was not representative of the population, the results cannot be generalised. The conclusion can be drawn however that in these schools the relationship between how giftedness and talent is defined and the identification practices, as advocated by Bevan-Brown (2009), Mahaki and Mahaki (2007) and the Ministry of Education (2012a), is rather tenuous.

Effective Practice

The main findings established here were that teachers believe that those procedures that work when identifying any gifted and talented student work similarly for Māori students, but that the numbers of students indicate that this is not the case. Most schools recommended a multi-categorical approach that included assessment, teacher observation and intuition, peer nomination and parent or whānau nomination. While this is a positive finding and in line with recommendations from the Ministry of Education (2012a), these results do not adequately meet this research objective as the aim was to share aspects of practice that are effective in the identification of *Māori* students who are gifted and talented. These findings only demonstrate aspects of practice that are effective in identifying students in a very narrow definition of what it means to be gifted and talented as only data around identification in the areas of academic giftedness, leadership and sporting ability was obtained through this study.

The numbers of Māori students who had been identified was very low and predominantly in the area of academic giftedness. This finding invites further research into whether all the students who are gifted and talented have been identified because it seems unrealistic that there are not any Māori students gifted and talented in cultural traditions and values at any of the respondent schools, unless these were identified prior to the last 12 months and therefore not mentioned by the respondents in the survey question. Further research would also be valuable into the numbers of students identified in other cultural groups to compare the rates and areas of identification as well as the methods used to identify students in these groups.

Barriers and Challenges

The most common barrier or challenge was related to the lack of teacher expertise and knowledge about Māori conceptions of giftedness and talent. This finding is consistent with the findings reported in the literature (Education Review Office, 2008; Riley et al., 2004). Issues were also raised to do with the reluctance of children to participate, peer pressure and student behaviour masking gifts and talents. These issues can be

resolved by developing an environment that is culturally responsive so that students see their culture reflected and valued in the school and feel comfortable and confident in displaying their gifts and talents, but this requires staff who are able to create these environments and are aware of the various gifts and talents that are valued in the cultures that exist in their classrooms which brings us to the next objective.

Professional Learning and Development

The objective of this area of inquiry was to establish if there were links between the cultural responsiveness of schools' identification processes and practices and the amount of Professional Learning and Development (PLD) they had undertaken in this area. Only one school had undertaken any PLD that touched on the identification of Māori students who are gifted and talented, but no conclusions can be drawn about the impact of this PLD. This school had a very low number of Māori students and had not identified any as being gifted and talented in the last 12 months. What can be concluded, as indicated by three of the respondent schools, is that this is an area where schools are in need of some effective and ongoing PLD in the area of Māori giftedness and talent. This message is a very common conclusion in research into gifted and talented education in Aotearoa New Zealand, and one also made by Bevan-Brown (1993), the Education Review Office (2008) and Riley et al. (2004).

Relationship of Research to Literature

This thesis offers an original contribution to research about education in Aotearoa New Zealand and highlights a number of interesting findings including the importance of cultural responsiveness and teacher knowledge to the identification of Māori students who are gifted and talented. It also provides some examples of definitions of Māori conceptions of giftedness and talent and ways in which these might be identified. However, because Māori are not a homogenous group, the important point to note is that consultation with the school community is vitally important to ensure that staff are aware of the characteristics that are valued by their particular Māori community and how these characteristics may manifest in students.

The findings of this study show that the conclusions of the Education Review Office (2008) and Riley et al. (2004) still stand today, that the identification of Māori students who are gifted and talented is an area that many schools still need to work on. The research indicates that although some schools have definitions and identification practices which are culturally responsive, their practices are not resulting in the formal identification of the numbers of gifted and talented Māori students that are suggested by the literature.

Further Research

As mentioned in the discussion of the achievement of the objectives of this study, there are many opportunities for further research presented by this thesis. The main opportunity arises from the finding that no Māori students had been identified in the area of culture specific abilities and/or qualities in the last 12 months. Further research needs to be carried out into the reasons for this finding as well as data gathered from a wider sample to see if this was an anomaly present in the respondent schools or a more wide spread phenomenon.

This research also provides a basis for further study into the next stage of the process in gifted and talented education of the provision that is made for the students who are identified. Investigation into the extent, effectiveness and appropriateness of provisions for Māori students who are gifted and talented in culture specific abilities and/or qualities would provide a valuable contribution to the field.

Recommendations for Policy and Practice

On the basis of the findings of this research, the recommendation is made to schools that they encourage their teachers to undertake Professional Learning and Development in the development of culturally responsive environments for Māori students. This step would benefit not only the Māori students who may be gifted and talented but all Māori students in their classrooms. As explained in Chapter Five there

are many providers offering professional learning and development in this area, however schools need to have time and money to take part in these initiatives. With the current demands on primary schools to implement National Standards and the focus on raising literacy and numeracy levels, unfortunately gifted and talented education seems to not be a priority. This is a short sighted view however, and one that does not take into account the benefit improving gifted and talented education provides for all students, encapsulated by notion that "a rising tide lifts all ships" (Renzulli, 1998, p. 1). The Ministry of Education needs to reassess the current disproportionate weight perceived by schools to be given to the improvement of literacy and numeracy levels. Schools need to be provided with the means to seek ways of improving these levels that will also benefit gifted and talented students such as developing culturally responsive environments that cater to all students needs.

Not only do teachers already in schools need to take part in Professional Learning and Development in this area, but I would suggest that pre-service teacher education also needs to take note of this finding. More in-depth coverage of the importance of developing culturally responsive environments and how this may be done is needed in pre-service teacher education as in Aotearoa New Zealand gifted and talented students spend the majority of their time in the ordinary classroom (Ministry of Education, 2012a).

Secondly, an important recommendation arises from this study as to the importance of schools undertaking consultation with their Māori community about the areas of ability that are valued in their conception of giftedness and talent and ensuring that teachers are aware of the characteristics that may manifest in the demonstration of high ability in these areas. As each community may have a slightly different view of the concept of Māori giftedness and talent, it is important schools do not just adopt a generic model but develop a relationship and seek out opinion from their Māori community.

Thirdly, schools need to use the knowledge gained from the PLD and consultation to redevelop their policy documents about gifted and talented education to include clear descriptions of their school definitions of culture-specific giftedness and talent. They also need to clearly document culturally appropriate identification procedures and practices for use by their staff in order to provide a clear pathway for teachers to confidently identify Māori students who are gifted and talented.

Final Thoughts

Even though this study was of a small sample, the correlation of findings in the literature and previous research with what was discovered to be happening in the 11 schools studied provides a snapshot of the state of identification practices for Māori students. It is hoped that the recommendations made here will be taken heed of and that schools developing their gifted and talented education programmes will be aware of the importance of considering how they intend to identify Māori students who are gifted and talented. The information compiled here and the works of Bevan-Brown (1993, 2000, 2005a, 2005b, 2009, 2010, 2011), Education Review Office (2008), Jenkins (2002), Mahaki and Mahaki (2007) and Riley et al. (2004) provide an excellent starting point for schools to base this development on and along with consultation with their Māori community, the identification of Māori students who are gifted and talented need not be a daunting prospect.

References

Amituanai-Toloa, M., McNaughton, S., Kuin Lai, M. & Airini. (2010). *Ua aoina le manogi o le lolo: Pasifika schooling improvement research – Final report.* Retrieved May 5, 2012 from: http://www.educationcounts.govt.nz/publications/pasifika_education/ua-aoina-le-manogi-o-le-lolo-pasifika-schooling-improvement-research-final-report/

Baldwin, A. Y. (2002). Culturally diverse students who are gifted. *Exceptionality , 10*(2), 139-147.

Banks, J. A. (2010). Multicultural education: Characteristic and goals. In J. A. Banks, & C. A. McGee Banks (Eds.), *Multicultural Education: Issues and Perspectives* (pp. 3-32). Hoboken, New Jersey: John Wiley & Sons.

Bevan-Brown, J. (1993). Special abilities: A Māori perspective. Wellington, New Zealand: He Parekereke, Department of Education, Victoria University of Wellington.

Bevan-Brown, J. (2000). Running the gauntlet: A gifted Māori learner's journey through secondary school. *Proceedings of the 'Now is the future, the gifted student in today's secondary school' conference.* Auckland, New Zealand: George Parkyn Centre.

Bevan-Brown, J. (2005a). Gifted and talented Māori learners. In D. McAlpine, & R. Moltzen (Eds.), *Gifted and talented: New Zealand perspectives* (2 ed., pp. 171-198). Wellington, New Zealand: Kanuka Grove Press.

Bevan-Brown, J. (2005b). Providing a culturally responsive environment for gifted Māori learners. *International Education Journal , 6* (2), 150-155.

Bevan-Brown, J. (2009). Identifying and providing for gifted and talented Māori students. *Apex: The New Zealand Journal of Gifted Education , 15* (1).

Bevan-Brown, J. (2010). Components of a Māori concept of giftedness. In A. Macfarlane (Ed.), *Above the clouds: Ka rewa ake ki ngā kapua - Identifying and nurturing Māori students of promise* (pp. 165-167). Christchurch: Te Waipounamu Focus Group.

Bevan-Brown, J. (2011). Indigenous concepts of giftedness. In W. Vialle (Ed.), *Giftedness from an indigenous perspective* (pp. 10-23). Wollongong: Australian Association for the Education of Gifted and Talented.

Boswell, R. (2008). Template for recognising Māori giftedness in schools based on work by Pita and Clare Mahaki. In A. Macfarlane (Ed.), *Above the clouds: Ka rewa ake ki ngā kapua - Identifying and nurturing Māori students of promise* (pp. 155-163). Christchurch: Te Waipounamu Focus Group.

Bracken, B. A. (2008). Nontraditional strategies for identifying nontraditional gifted and talented students. In J. L. VanTassel-Baska (Ed.), *Alternative assessments with gifted and talented students* (pp. 17-40). Waco, Texas: Prufrock Press.

Briggs, C. J., Reis, S. M., & Sullivan, E. E. (2008). A national view of promising programs and practices for culturally, linguistically, and ethnically diverse gifted and talented students. *Gifted Child Quarterly , 52* (2), 131-145.

Cathcart, R. (2005). *They're not bringing my brain out: Understanding and working with gifted and talented learners.* Auckland, New Zealand: Hatchette Livre NZ Ltd.

Cathcart, R., & Pou, N. (1994). The gifted child who is Māori. *NZAGC Gifted Children. Their Future: Our Children , 17*(3), 13-17.

Chaffey, G. (2008). Is gifted education a necessary ingredient in creating a level playing field for indigenous children in education? *Australasian Journal of Gifted Education , 17* (1), 96-99.

Chaffey. (2009). Gifted but underachieving: Australian indigenous children. In T. Balchin, B. Hymer, & D. J. Matthews (Eds.), *The Routledge International Companion to Gifted Education* (pp. 106-114). New York: Routledge.

Check, J., & Schutt, R. K. (2012). *Research methods in education.* Thousand Oaks: Sage Publications Ltd.

Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education.* New York: Routledge.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4 ed.). Boston: Pearson Education.

Davidson, C., & Tolich, M. (2003). Charting research design. In C. Davidson, & M. Tolich (Eds.), *Social science research in New Zealand: Many paths to understanding* (2 ed., pp. 102-120). Auckland: Pearson Education.

Education Review Office. (2008). *Schools' provisions for gifted and talented students.* Wellington, New Zealand: Education Review Office.

Farthing, B. R., Irvine, M. I., & Millar, S. R. (2007). Mapping the journey: Putting Māori perspectives of giftedness into practice. *Proceedings of the 17th Biennial Conference of the World Council for Gifted and Talented Children.* University of Warwick, England.

Ford, D. Y. (2010). Recruiting and retaining gifted students from diverse ethnic, cultural and language groups. In J. A. Banks, & C. A. McGee Banks (Eds.), *Multicultural Education: Issues and Perspectives* (7 ed., pp. 371-391). Hoboken, New Jersey: John Wiley & Sons.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (8th ed.). New York: McGraw-Hill.

Gagne, F. (2003). Transforming gifts into talents: The DMGT as a developmental theory. In N. Colangelo, & G. A. Davis (Eds.), *Handbook of Gifted Education* (pp. 60-74). Boston: Allyn & Bacon.

Gallagher, J. J. (2002). *Society's role in educating gifted students: The role of public policy.* University of Connecticut, The National Research Center on Gifted and Talented, Storrs.

Gardner, H. (2006). *Multiple Intelligences: New Horizons.* USA: Basic Books.

Hartas, D. (2010). *Educational research and inquiry: Qualitative and quantitative approaches.* London: Continuum International Publishing Group.

Jenkins, H. (2002). *Culturally relevant pedagogy: Embracing Māori giftedness.* Dissertation (MEd), University of Waikato, Hamilton, New Zealand.

Jenkins, H., Moltzen, R., & Macfarlane, A. (2004). Embracing Māori giftedness: The dynamics of power, culture and visibility. *New Zealand journal of educational studies , 39* (1), 55-70.

Keen, D. (2005). Talent in the new millennium: A two-year research study of gifted education. *International Education Journal , 6* (2), 206-217.

Macfarlane, A. (2004). *Kia hiwa ra! Listen to culture - Māori students' plea to educators.* Wellington, New Zealand: New Zealand Council for Educational Research.

Macfarlane, A., Christensen, J., Comerford, C., Martin, J., & York, S. (2010). Preface. In A. Macfarlane, *Above the clouds, Ka rewa ake ki ngā kapua: Identifying and nurturing Māori students of promise* (pp. iii-vii). Christchurch, New Zealand: Te Waipounamu Focus Group.

Mahaki, P., & Mahaki, C. (2007). Mana tu, mana ora - Identifying characteristics of Māori giftedness. *Proceedings of the National Gifted Education Advisor Hui.* Auckland, New Zealand.

Mahuika, R. (2007). Māori gifted and talented education: A review of the literature. *MAI Review , 1*.

McAlpine, D. (2004). What do we mean by gifted and talented? Concepts and definitions. In D. McAlpine, & R. Moltzen (Eds.), *Gifted and Talented: New Zealand Perspectives* (pp. 33-65). Palmerston North, New Zealand: Kanuka Grove Press.

McKenzie, J. A. (2001). Māori children with special abilities: Taking a broader perspective. *New Zealand Principal , 16* (2), 8-10.

McKenzie, J. A. (2004). The influence of identification practices, race and SES on the identification of gifted students. In J. S. Renzulli (Ed.), *Identification of students for gifted and talented programs* (pp. 131-136). Thousand Oaks, California: Corwin Press.

Ministry of Education. (2000). *Gifted and Talented Students: Meeting their needs in New Zealand schools.* Wellington: Learning Media.

Ministry of Education. (2002). *Initiatives for gifted and talented learners.* Wellington, New Zealand: Ministry of Education.

Ministry of Education. (2008). *Ka Hikitia - Managing for success: The Māori education strategy 2008-2012.* Wellington, New Zealand: Ministry of Education.

Minstry of Education. (2012b). National administration guidelines.

Ministry of Education. (2012a). *Gifted and Talented Students: Meeting their needs in New Zealand schools.* Wellington, New Zealand: Learning Media.

Neuman, W. L. (2000). *Social research methods: Qualitative and quantitative approaches* (4 ed.). Boston: Allyn & Bacon.

Reid, N. (1989). Contemporary Polynesian conceptions of giftedness. *Gifted Education International , 6* (1), 30-38.

Reid, N. (1990). Identifying the culturally different gifted in New Zealand. *APEX , 3* (3), 3-10.

Reid, N. (1991). Gifted and disadvantaged in New Zealand. In B. Wallace, & H. B. Adams (Eds.), *World perspectives on the gifted disadvantaged.* Bicester, England: AB Academic Publishers.

Reid, N. (1992, July). Correcting cultural myopia: The discovery and nurturance of the culturally different gifted and talented in New Zealand. *Paper presented at the Asian Conference on Giftedness, Taipei, Taiwan.* Wellington, New Zealand: New Zealand Council for Educational Research.

Riley, T., & Rawlinson, C. (2006). Teacher education in gifted and talented education in New Zealand. *National Gifted and Talented Conference - Rising tides: Nurturing our gifted culture* (pp. 80-85). Wellington, New Zealand: http://www.confer.co.nz/gnt/finalpapers2.pdf.

Riley, T., Bevan-Brown, J., Bicknell, B., Carroll-Lind, J., & Kearney, A. (2004). *The extent, nature and effectiveness of planned approaches in New Zealand schools for providing for gifted and talented students: Report to the Ministry of Education.* Wellington, New Zealand: Ministry of Education.

Robson, B., & Reid, P. (2001). *Ethnicity matters: Māori perspectives .* Retrieved 26 February from http://www.stats.govt.nz/browse_for_stats/population/census_counts/review-measurement-of-ethnicity/maori-perspective.aspx.

Rymarczyk Hyde, C. (2010). Māori children with special abilities (MCWSA). Recognising and providing for: "Ngā pohutukawa roa - tall pohutukawas". In A. Macfarlane (Ed.), *Above the clouds: Ka rewa ake ki ngā kapua - Identifying and nurturing Māori students of promise* (pp. 93-100). Christchurch, New Zealand: Te Waipounamu Focus Group.

Shuker, R. (2003). Content analysis. In C. Davidson, & M. Tolich (Eds.), *Social science research in New Zealand: Many paths to understanding* (2 ed., pp. 347-361). Auckland: Pearson Education.

Statistics New Zealand. (2012). *Statistical standard for Māori descent.* Retrieved 26 February from http://www.stats.govt.nz/surveys_and_methods/methods/classifications-and-standards/classification-related-stats-standards/maori-descent/definition.aspx.

Sternberg, R. J. (2004). Culture and intelligence. *American Psychologist , 59* (5), 325-338.

Sternberg, R. J. (2007). Why a cultural approach to giftedness? In S. N. Phillipson, & M. McCann, *Conceptions of giftedness: Sociocultural perspectives* (pp. xv-xviii). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Strong Scott, M., Stoyko Deuel, L.-L., Jean-Francois, B., & Urbano, R. C. (2004). Identifying cognitively gifted ethnic minority children. In A. Y. Baldwin (Ed.), *Culturally diverse and underserved populations of gifted students* (pp. 35-48). Thousand Oaks, California: Corwin Press.

Tuckman, B. W., & Harper, B. E. (2012). *Conducting educational research.* Plymouth, United Kingdom: Rowman & Littlefield Publishers.

VanTassel, J. (2009). The role of gifted education in promoting cultural diversity. In T. Balchin, B. Hymer, & D. J. Matthews (Eds.), *The Routledge international companion to gifted education* (pp. 273-280). New York: Routledge.

Webber, M. (2011). Gifted and proud: On being exceptional and Māori. In P. Whitinui (Ed.), *Kia tangi te tītī: Permission to speak* (pp. 227-241). Wellington, New Zealand: NZCER Press.

Appendix A: Ethics Approved Research Materials

Cover Letter to Schools

[Printed on Massey University letterhead]

 5 June 2012

 Dear Principal and Board of Trustees,

As a Masters of Education student at Massey University, I would like to invite your school to take part in my thesis research. The purpose of this research is to investigate current processes and practices used in the identification of Māori students who are gifted and talented, with the aim of identifying and sharing features that are working for ##### schools. I am being supervised by Associate Professors Tracy Riley and Jill Bevan-Brown.

I aim to gain permission from as many schools in ##### as possible so your participation in this survey would be greatly appreciated. If you agree to take part in this study, the Principal and/or Teacher-in-charge of Gifted and Talented Education will be required to complete a questionnaire, which is enclosed. This will provide information for the initial phase of the research. I also request that you provide a copy of your school's policy on gifted and talented education as well as any other documents such as identification checklists, tests that are carried out to identify gifted and talented students, nomination forms or any other documented methods that are currently used in your school to identify gifted and talented students.

After reading this information sheet, if you wish to take part, please complete the questionnaire and return it along with copies of any documents you use in the identification of gifted and talented students who are Māori, in the postage-paid envelope supplied. The questionnaires and any documents you provide will be confidential and individual schools will not be identified or identifiable in the research report. It is assumed that by completing and returning the questionnaire that you give your informed consent to participate in the research.

All data gathered for this research will be stored in a locked filing cabinet and anything identifying individual schools, teachers or students will be removed from the documentation you supply. The researcher will retain the information gathered for five years. Data will be collated and presented to Massey University in standard thesis format. I plan to have a summary of the research available from the first week of November, and I will provide you with a copy upon request. The data collected will only be used for the purposes of this research, and any other publications or presentations which may arise.

All participants in this study have the right to:

- Decline to participate;

- Decline to answer any particular question;

- Withdraw from the study at any time;

- Ask any questions about the study at any time during participation;

- Provide information on the understanding that neither their name or name of their school will be used unless they give permission to the researcher;

- Be given access to a summary of the project findings when it is concluded.

In order to have a shared understanding as our starting point, the operating definition of Māori giftedness and talent that is to be used in this research is as follows:

> The Māori concept of giftedness and talent is holistic in nature and includes a wide range of abilities and qualities. Giftedness for Māori not only includes demonstrating exceptional cognitive, affective, aesthetic, artistic, musical, psychomotor, social, intuitive and creative abilities but it also includes exceptionality in culturally valued qualities. These qualities include:

- *āwhinatanga* (helping and serving others),

- *manaakitanga* (hospitality),

- *wairuatanga* (spirituality),

- *whānaungatanga* (famliness),

- *kaitiakitanga* (care for environment, resources, guardian of knowledge) and

- *rangatiratanga* (leadership).

From a Māori perspective, giftedness and talent is viewed as being owned by the group and is expected to be used in the service of others.

(Bevan-Brown, 2009; Mahaki & Mahaki, 2007; McKenzie, 2001)

This project has been evaluated as peer reviewed and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher named above is responsible for the ethical conduct of this research.

If you have any questions about the conduct of this research that you wish to raise with someone other than the researcher, please contact Professor John O'Neill, Director (Research Ethics), telephone 06 350 5799, e-mail humanethics@massey.ac.nz.

If you would like any more information before making your decision please contact the researcher, Emma Scobie-Jennings, by phone on 0221259112 or by email at emmascobie@hotmail.com. You may also contact my supervisors, Associate Professors Tracy Riley and Jill Bevan-Brown, 06 350 5799 or T.L.Riley@massey.ac.nz.

Kind regards,

Emma Scobie-Jennings

References:

Bevan-Brown, J. M. (2009). Identifying and providing for gifted and talented Māori students. *APEX, 15*(4), 6-20. Retrieved online from http://www.giftedchildren.org.nz/apex/

Mahaki, P. & Mahaki, C. (2007). Mana tu, mana ora – Identifying characteristics of Māori giftedness. In *Proceedings of the National Gifted Education Advisor Hui,* Auckland, New Zealand.

McKenzie, J. (2001). Māori children with special abilities: taking a broader perspective. *NZ Principal,* June 8-10.

[Printed on Massey University letterhead]

Questionnaire: An Investigation into how Māori Students who are Gifted and Talented are Identified in Mainstream Schools

> Directions: Please answer the following questions in relation to your school. Remember that a response of 'no' or 'none' is just as important as 'yes'. Questionnaires may be filled in by individuals or groups, depending on who has responsibility for gifted and talented education in your school.
>
> Please complete by 19 June 2012 and return along with copies of any documents used in the identification of Maori students who are gifted and talented (e.g. policies, procedures, nomination templates, checklists, tests) in the addressed, postage paid envelope or scan and email to emmascobie@hotmail.com.

School Information

Please circle the characteristics below that describe your school.

School Type: Primary   Full Primary   Intermediate   Secondary   Composite

Ethnic composition (%): Māori _____   NZ European_____   Other_____

Decile: 1   2   3   4   5   6   7   8   9   10

Roll Number:

Location: Urban (within city limits)   Rural

Does your school have a: Bi-lingual unit   Yes ◯   No ◯   Year levels_____

Immersion unit   Yes ◯   No ◯   Year levels_____

Survey completed by: Principal

Deputy Principal/Assistant Principal

Gifted and Talented Co-ordinator

Teacher-in-charge of Gifted and Talented Education

Gifted and Talented Education Committee

Other (please specify): _____

Co-ordination/Responsibility

1. In your school, who is responsible for identifying Māori learners who are gifted and talented? (You may tick more than one)

   ◯ Principal   ◯ DP/AP   ◯ GATE Co-ordinator   ◯ Teacher-in-charge of GATE

   ◯ Individual teacher

   ◯ GATE Committee (please specify number and roles of people involved in this committee):_____

   ◯ Other (please specify):_____

2. Does someone have overall responsibility for maintaining records of Māori learners that have been identified as gifted and talented?
   Yes ◯   No ◯

   If yes, who is this person?

   ◯ Principal   ◯ DP/AP   ◯ GATE Co-ordinator   ◯ Teacher-in-charge of GATE

   ◯ Individual teacher

   ◯ GATE Committee (please specify number and roles of people involved in this committee):_____

   ◯ Other (please specify):_____

Definition and Identification

3. Does your school have a school-wide definition of giftedness and talent?
   Yes ◯   No ◯

   If yes, please specify it here or include a copy of it when you return the questionnaire.

4. When developing your definition did you consult with your school's Māori community?
   Yes ◯   No ◯

5. Has your school formally identified any students who are Māori as gifted and talented in the last twelve months?

Yes ◯   No ◯

If yes, please use the table below to indicate the areas of ability, year levels and identification methods for these students. Please indicate the areas of ability you consider the major focus of their identification.

Areas of Ability	*Year Levels* *(please indicate the year level and number of students identified)*	*Identification Methods* *(please indicate the identification method/s most commonly used for each area e.g. Teacher observation, checklist, standardised tests, IQ tests, teacher-made tests, portfolios, auditions/performances, parent nomination, self-nomination, peer nomination, whanau nomination)*
Intellectual/Academic		
Creativity		
Expression through Visual Arts		
Expression through Performing Arts		
Social		
Leadership		
Culture Specific Abilities and/or Qualities (See http://www.giftedchildren.org.nz /apex/pdfs15/Bevan-Brown% 20J.pdf for some examples).		
Expression through Physical Abilities/Sport		
Spiritual		
Emotional		
Other (please specify):		

6. What strategies work in your school when identifying Māori students who are gifted and talented?

7. What are the challenges and barriers faced in your school when identifying Māori students who are gifted and talented?

What steps (if any) have been taken to address these challenges and/or barriers?

8. Have any staff at your school undertaken Professional Learning Development related to Māori students who are gifted and talented in the last three years?

Yes ⃝   No ⃝

If yes, what was this Professional Learning Development and who was involved (e.g. all teachers, co-ordinator, committee)?

In the PLD undertaken were strategies and/or tools for identifying Māori students who are gifted and talented included in the Professional Learning Development?

Yes ⃝   No ⃝

Written Policies and Procedures

9. Within your school's written policies and procedures, is the identification of gifted and talented Maori students specifically addressed?

   Yes ◯   No ◯

   If yes, in which policies or procedures? (Please provide copies of these policies)

10. Were parents and/or whanau involved in developing these policies or procedures?

    Yes ◯   No ◯

    If yes, in what ways?

11. Do you have any other comments you would like to make regarding your school's processes, policies and procedures for identifying gifted and talented students who are Māori? If so, please use the space below.

Thank you for taking the time to complete this questionnaire

Questionnaire adapted from:

Riley, T., Bevan-Brown, J., Bicknell, B., Carroll-Lind, J., & Kearney, A. (2004). *The extent, nature and effectiveness of planned approaches in New Zealand schools for providing for gifted and talented students: Report to the Ministry of Education.* Wellington, New Zealand: Ministry of Education.

Appendix B: Recognising Māori Giftedness in Schools

IMPORTANT: This template needs to be used in consultation with local iwi or significant members of the local Māori community. Changes to these areas of ability and characteristics may be necessary.

This template was developed based on components in Māori conceptions of giftedness and talent recommended by Bevan-Brown (1993, 2009), Jenkins (2002) and Mahaki and Mahaki (2007). It was first compiled in this format by Boswell (2008) with just the areas of ability and characteristics recommended by Mahaki and Mahaki (2007), excluding the area of wairuatanga. The following template includes characteristics of giftedness and talent in wairuatanga as well as adding further characteristics suggested by Bevan-Brown (1993, 2009) and Jenkins (2002) in each area of ability. Boswell (2008) suggests asking the following three questions in regard to each area of giftedness and talent in order to reflect on how these abilities and qualities may be identified and catered for in individual schools as well as recognising the further learning that needs to occur.

- Where would we see this in our school/community?
- How could we nurture this in our school/community?
- What do we need to know/find out?

Area of Ability	Description	Indicators A student gifted and talented in this area may:
Awhinatanga / Manaakitanga	Generosity – honouring, caring, showing sensitivity and giving mana to others, helping and assisting, providing service to others	• Exhibit the capacity and natural inclination to respond, nurture, and care for others; • Have integrity and mana; • Have a sense of occasion; • Be welcoming, demonstrate hospitality; • Show generosity of spirit, be giving and hardworking and understand the importance of this; • Demonstrate reciprocity; • Be strong in tautoko qualities (support; value that one person's success is the success of the group). • Have a well developed sense of altruism and be selfless in service to others.
Whānaungatanga	Relationships, kinship, sense of family connection	• Form, strengthen and maintain bonds with peers; • Value and promote loyalty and inclusiveness; • Be a role model, team player, and connect well with others; • Demonstrate an awareness of relationships and positions; • Be aware of their responsibility, especially in relationships with others; • Be strong in tautoko; • Have a keen interest in and in-depth knowledge of their particular iwi or hapū including their history, whakapapa, tikanga, dialect and whakataukī.
Wairuatanga	Balanced – harmonious, spiritual, grounded, calm	• Have advanced spiritual understanding, perception, appreciation and ability; • Have ability to 'read' the wairua of an environment or event and to respond appropriately; • Have the ability to nourish and restore their wairua; • Be a sensitive and reflective thinker; • Demonstrates humility and is open and giving; • Sometimes appear absent-minded or introspective but can be incredibly insightful; • Have a broad knowledge of Māori mythology and able to interpret myth messages in a contemporary context.

Kaitiakitanga	Care taker/guardian of knowledge, environment and resources	• Have a very strong awareness of global issues and responsibility; • Recognise that human welfare and care for the environment are inextricably linked; • Internally driven with a passion; • Perceptive – aware of the need to nurture and maintain knowledge, environment and resources for the short term and long term; • Demonstrate that need comes before self; • Possibly be a gifted storyteller – have an excellent memory, knowledge of and pride in linking whakapapa, iwi and geography. • Have a broad knowledge of Māori, iwi and hapū history and tikanga; • Have an in-depth knowledge of traditional healing principles and practices.
Rangatiratanga	Leadership ability that inspires unity. Includes three different types of leaders – up front style, leadership-by-example, and the background leader	• Possess and be accorded a high degree of mana from their peers; • Be visionary and strategic thinkers – their opinions are sought, valued and considered; • Stand up for beliefs and values sometimes against adversity; • Inspire and motivate others to work for the common good; • Show initiative and motivation, see beyond the obvious to recognise what needs to be done; • Often have the mandate from the group as the spokesperson; • Present controversial ideas with respect; • Have a high level of respect for and affinity with kaumātua.
Tikanga	Knowledge of traditional language and etiquette	• Communicate in te reo Māori clearly, fluently and flexibly using a variety of advanced language structures and figures of speech; • Demonstrate initiative and appropriate behaviour before, during and after events; • Have knowledge of protocols, customs and rituals that demonstrate and reinforce values and beliefs and can compose, deliver and respond to a karanga, karakia, mihimihi or whaikōrero appropriate to the occasion; • Maintain, direct and guide others in appropriate tikanga; • Transfer and appropriately adapt tikanga to a variety of situations and environments.
Kaitiakitanga		

Te Mahi Rehia	Recreational pursuits – Physical and artistic performance traditional knowledge and skills.	Demonstrate ihi, wehi and wana (linking appropriate knowledge of whakapapa and iwi to the occasion) and advanced practical and creative ability in one or more of the following: • Visual arts (including raranga, tukutuku, whakairo, kowhaiwhai); • Music (composition and performance); • Performing arts (including waiata, haka, karakia, mau rakau, toi whakaari, whai kōrero, karanga, poi); • Sports and physical pursuits (including Māori games, pastimes and practices such as taiaha expertise).
Mātauranga	Knowledge – intellect, thinking skills, wisdom, education	• Have intrinsic motivation and persistence to seek and acquire knowledge; • Have advanced thinking skills; • Have high level of intelligence and knowledge; • Learn quickly and be able to transfer knowledge into different contexts; • Be intuitive and visionary; • Be acknowledged and sought after for their expertise; • Share their knowledge wisely and with discretion; • Have a highly developed memory; • Demonstrate ability in language skills e.g. oral storytelling – excellent memory, knowledge of and pride in whakapapa, iwi, geography, and can make links.

Appendix C: Questionnaire Summary Statistics

The results for each question in the survey are summarised below.

Co-ordination/Responsibility

1. In your school, who is responsible for identifying Māori learners who are gifted and talented? (You may tick more than one)

Responses	Number of Schools
Individual Teachers	5
Principal, Individual Teachers	2
Other (Whole Staff)	1
Gate co-coordinator, Individual Teachers	1
Principal, Deputy/Assistant Principal, Teachers	1
Principal, Individual Teachers, GATE committee	1

2. Does someone have overall responsibility for maintaining records of Māori learners that have been identified as gifted and talented?

Responses	Number of Schools
Yes	4
No	7

If yes, who is this person?

Responses	Number of Schools
Principal, Deputy/Assistant Principal, Individual Teachers	2
Principal, Individual Teachers	1
Deputy/Assistant Principal	1
N/A	7

Definition and Identification

3. Does your school have a school-wide definition of giftedness and talent?

Responses	Number of Schools
Yes	9
No	2

If yes, please specify it here or include a copy of it when you return the questionnaire.

Responses	Number of Schools
Copy included/attached	5
No response	2
Talents/strengths in an area that stand them above being just 'very good' at something.	1
Not current	1
At our school this is a 'Good Practice' policy	1
Inside general policy and procedure	1

4. When developing your definition did you consult with your school's Māori community?

Responses	Number of Schools
Yes	4
No	7

5. Has your school formally identified any students who are Māori as gifted and talented in the last twelve months?

Responses	Number of Schools
Yes	4
No	7

If yes, please use the table below to indicate the areas of ability, year levels and identification methods for these students. Please indicate the areas of ability you consider the major focus of their identification.

Areas of Ability	Year Levels (please indicate the year levels of the students identified)	Identification Methods (please indicate the identification method/s most commonly used for each area e.g. Teacher observation, checklist, standardised tests, IQ tests, teacher-made tests, portfolios, auditions/performances, parent nomination, self-nomination, peer nomination, whānau nomination)
Intellectual/Academic	1, 4-6, 7, 8, 8, 8	-Teacher observation and assessment -Teacher observation, academic data and interaction with teachers and peers -Academic data -Teacher observation, academic data and peer nomination
Creativity	-	-
Expression through Visual Arts	-	-
Expression through Performing Arts	-	-
Social	-	-
Leadership	4-6	Teacher observation, peer nomination
Culture Specific Abilities and/or Qualities (See for some examples).	4-6	Teacher observation, peer nomination
Expression through Physical Abilities/Sport	8; 5	Sporting ability, Teacher observation
Spiritual	-	-
Emotional	-	-
Other (please specify):	-	-

6. What strategies work in your school when identifying Māori students who are gifted and talented?

Responses
Tests, intuition, knowledge of child/whānau
Same for all children – collegial discussion, recognition of individual talents in all areas
Creating opportunities and encouraging and supporting children to become involved and step up to the challenge
As for general students
Peer nomination, academic data, teacher nomination
Peer, parent/whānau nomination, teacher identification
Meeting with whānau – developing a plan all will support
At the moment, the teacher in the bilingual unit is using the ID developed by Robyn Boswell and me as a guide only. Other teachers differentiate in their classrooms too.
We recognise some of what Maori classify as gifts and talents within their culture and these are clearly defined in ID processes.

7. What are the challenges and barriers faced in your school when identifying Māori students who are gifted and talented?

Responses
None
Can't think of any
Sometimes reluctance of children to participate. Sometimes lack of parental support. Peer pressure.
Ethnic delineations not obvious - any points of distinction from general school population less apparent. Maybe best seen as a series of continua which may or may not have ethnic bias.
Identification of talent beyond academic ability
Teachers having an understanding of what indicators of Maori giftedness might be
Teacher expertise - professional development
Home circumstances - parents do not want to buy in, home support - for after school hours opportunities, teacher availability for extra support, behaviour of students
Lack of focus on this area school-wide.
These have been largely a lack of understanding of all of what constitutes giftedness within Maori culture. We have started to address this issue lately.

7. a. What steps (if any) have been taken to address these challenges and/or barriers?

Responses
I am taking part in an international research fellowship next year. One of my main areas of research will be based on cultural differentiation of gifted programmes related to both cultural minorities and indigenous populations. This will provide a solid base to review our existing ID processes and programmes we run within our small group of schools.
For now a gifted focus is a goal for the future.

8. Have any staff at your school undertaken Professional Learning Development related to Māori students who are gifted and talented in the last three years?

Responses	Number of Schools
Yes	1
No	9
No answer	1

8a. If yes, what was this Professional Learning Development and who was involved (e.g. all teachers, co-ordinator, committee)?

Responses
Ka Hikitia, Inclusive Schools
Have undertaken PLD about differentiation of the curriculum but not specifically for Māori

8b. In the PLD undertaken were strategies and/or tools for identifying Māori students who are gifted and talented included in the Professional Learning Development?

Responses	Number of Schools
Yes	1
No	2
No answer	8

Written Policies and Procedures

9. Within your school's written policies and procedures, is the identification of gifted and talented Maori students specifically addressed?

Responses	Number of Schools
Yes	2
No	9

If yes, in which policies or procedures? (Please provide copies of these policies)

Responses
Gifted and Talented Education Policy – Curriculum Implementation Plan
Gifted and Talented Good Practice Policy (Only slightly)

10. Were parents and/or whānau involved in developing these policies or procedures?

Responses	Number of Schools
Yes	5
No	4
N/A or no response	2

If yes, in what ways?

Responses
Consultation by visit and letter
They were asked if they wanted to be involved, some participated in questionnaires/surveys
Community consultation through meetings and surveys
In a sense they were keen for their child to be extended but they were more keen for behaviour support

11. Do you have any other comments you would like to make regarding your school's processes, policies and procedures for identifying gifted and talented students who are Māori? If so, please use the space below.

Responses
As we have so many nationalities here we address each child as taonga
We are in the process of introducing the Ministry of Education documents and the understanding around Maori learners. As we work through this we will develop systems, strategies and more understanding and knowledge of the best way to acknowledge Maori students.
Student population is 75% Maori, 5% Pacifika. We have had students on GKP previously but they mainly showed little interest. We now focus on meeting the needs of all learners in a mainstream setting. Currently working on identifying the gifts and talents of each child rather than separating those who may fit some label of 'Gifted and Talented'.
Our school is currently on a journey of learning about G & T processes. We are developing our ID process and looking forward to how we can best meet the needs of G & T learners.
When we do identify a student we have detailed conversations with the whānau. They so often want us to work more with social aspects - which proves beneficial - extension will be set in class and for home.
A big review on the way which will involve hui with our Maori parents!