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**IDENTIFICATION AND PROVISIONS
FOR GIFTED AND TALENTED STUDENTS
AT A BOYS' SECONDARY SCHOOL
IN NEW ZEALAND**

**A thesis presented in partial fulfilment of the
requirements for the degree of
Master of Educational Psychology
at Massey University, Palmerston North
New Zealand**

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ABSTRACT

Gifted and talented education in New Zealand differs from that of many other countries in several ways. New Zealand recognises that giftedness and talent can mean different things to different communities and cultures, and there is a range of appropriate approaches towards meeting the needs of all such students. It is considered essential to provide differentiated learning experiences across a continuum of approaches, beginning in inclusive classrooms to meet the needs of all students. In New Zealand there are also distinctive cultural considerations to be taken into account in the planning and delivery of gifted education. This case study was conducted to provide an in-depth look at one secondary school's journey and current practices in identification and provisions for gifted and talented students through a multi-methodology approach. The findings provide insightful information and implications for strategic planning not only for schools that are in the throes of implementing or sustaining an effective gifted and talented programme but also to broaden educators' understandings of gifted and talented education in New Zealand. Emerging themes pertaining to the interrelationships between definition, characteristics, identification, programmes and evaluations; the importance of ongoing school-wide professional development; cultivating a shared understanding of gifted and talented education; key stakeholder involvement; and sustainability are also discussed to inform best practice for gifted and talented students and future research in this field.

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CHAPTER 1

INTRODUCTION

This chapter provides an overview of gifted education including the policy and conceptualisation of giftedness and talent in New Zealand that guided the formulation of the rationale for this case study and the key research questions.

Gifted education in New Zealand

The vast amount of literature in the field of gifted and talented education provides us with many examples of how different societies have historically identified and nurtured the exceptional abilities of students. It has been said that New Zealand has drawn from the theory behind Renzulli's use of the metaphor, "A rising tide lifts all ships", for meeting the needs of gifted and talented students (Smith, 2007). New Zealand-based research gained momentum in the 2000s (e.g., New Zealand Working Party on Gifted Education, 2001; Education Review Office National Report, 2008). The landmark investigation (which comprised a comprehensive review of the literature, a national survey of schools, and ten case studies of best practice) carried out by Riley, Bevan-Brown, Bicknell, Carroll-Lind and Kearney (2004) in tandem with the expertise of the Ministry of Education Gifted and Talented Advisory Group consequently led to significant change in national educational policy legislation to guide schools in identifying and providing for gifted and talented students more effectively (Ministry of Education, 2012; Moltzen, 2003). Although positive steps have been made in the right direction, there remains a necessity for gifted and talented students to be more formally recognised and supported as priority learners with special education needs (Riley, & Bicknell, 2013). Theoretical models, additional case studies and national reviews should not only inform us whether the National Administration Guidelines are being met effectively in schools but also help with a targeted approach for long-term funding, support and resources for the identification and provisions for gifted and talented students in New Zealand.

New Zealand's policy and conceptualisation of giftedness and talent

Historically, support, enthusiasm and opportunities for gifted children in New Zealand schools have been sporadic due largely to the absence of a national policy and explicit recognition of giftedness and talent by the Ministry of Education (Riley, 2000).

Education reforms in the 1990s in tandem with lobbying from individuals committed to the education of gifted learners and funding for research and national programme of professional development (Moltzen, 2011) in our schools has led to significant shifts in shaping New Zealand's educational policy. This has not only given more focus on all students achieving positive outcomes as a result of their education but also, more recently, given impetus to raising awareness of the unique educational needs of gifted and talented students (McDonough, 2004). Since the launch of the New Zealand Government's gifted and talented education policy in June 2002, initiatives have also been established (e.g., 2006-2008 Talent Development Initiatives to Determine Effectiveness) to promote wider understanding of gifted and talented education in New Zealand (McDonough, 2004; Ministry of Education, 2000; 2002; Riley & Moltzen, 2010; 2011). The National Administration Guidelines (NAGs) detailing Ministry of Education expectations of schools, specifically NAG 1 (c) iii, specifies that: "each Board, through the Principal and staff, is required to on the basis of good quality assessment information, identify students who have special needs (including gifted and talented students)" (Ministry of Education, 2002; Moltzen, 2003). The Marland Report (1972); the creativity movement and Renzulli (1978); Gardner (1983, 1988); The New Zealand Department of Education (1986); and Gagné (1995, 2008) have all played a significant role in the shift from the conservative definition of gifted and talented based on a single criterion (e.g., high IQ) towards a more liberal and contemporary multi-dimensional approach in New Zealand schools (Borland, 1997; Ministry of Education, 2000; Pyryt & Bosetti, 2006).

Rationale for this case study research

New Zealand research and initiatives carried out since 2000 have assisted schools in developing and implementing policies and practices to meet the NAGs and principles for effective identification (Ministry of Education, 2000; Riley et al., 2004). Each school must develop a set of characteristics (e.g., learning; creative thinking; motivational; social leadership; and self-determination) alongside cultural indicators that reflect its own definition of, and approach to, the concept of giftedness and talent (Ministry of Education, 2000; 2012). Ongoing identification should be maintained throughout all levels of the school, and based on best current conceptions and theories of human aptitude, talent, and abilities (Edwards, 2005; Feldhusen & Jarwan, 2000). Whilst national surveys provide an indication of current approaches employed in the

identification and provisions for gifted and talented students, there is a lack of reported studies driven by research-based analysis in New Zealand schools informing these practices (Riley & Moltzen, 2011). This case study, within a multi-methodology framework, delves into the who, how, what, why, when and where of current practices for gifted and talented students at a boys' secondary school in New Zealand, with the main aim to broaden educators' understanding of the development, implementation, and evaluation of gifted and talented education in New Zealand.

CHAPTER 2

LITERATURE REVIEW

Introduction

The purpose of this literature review is two-fold: firstly, it served as a basis for the development of the case study questions and methodology; but primarily, it was carried out to explore the theory and research that has informed New Zealand's journey and current practice in gifted education as well as to evaluate and synthesise the evidence-base of best practice and current trends in identification and provisions for gifted and talented students. The literature review begins with conceptualisations of giftedness and navigates through the interrelated components of gifted education – definition, characteristics, identification, provisions and evaluation: all of which should not only enrich the understandings of the practices adopted at this case study school but also broaden educators' understandings of the development, implementation, and evaluation of gifted and talented education in New Zealand.

Defining giftedness and talent: Current trends

One of the first tasks for a school in meeting the needs of gifted and talented students is to define what the school community recognises as giftedness and talent. While many theories of giftedness and talent have been developed, there is no universally accepted theory or definition (Ministry of Education, 2012). Three common arguments, however, does provide a background to the way in which giftedness is currently viewed in our global, modern world, and in particular how these beliefs have influenced New Zealand conceptualisations: (1) developmentalism versus essentialism; (2) domain general versus domain specific; and (3) giftedness as a socio-cultural phenomenon (Tapper, 2012).

Conceptions of giftedness detailed in research generally have their derivation in Western European culture (Miller, 2011). The terms 'gifted' and 'talented' represent a range of diverse and special abilities rather than describe a single or homogenous group or category (Ministry of Education, 2012). Giftedness should be valued from a broad cultural perspective, one that is free from stereotypes, rather than a Eurocentric perspective (Moltzen, 2013 cited in Fraser, 2013). Furthermore, the Ministry of Education (2012) guidelines encourage schools to develop policies and practices that

demonstrate interconnectedness between the schools' definitions, identification, provisions and evaluation (Riley & Bicknell, 2013). The New Zealand Ministry of Education defines gifted and talented learners as "those with exceptional abilities relative to most other people, and have certain learning characteristics that give them the potential to achieve outstanding performance" (Ministry of Education, 2002, p.2). Gifted and talented students may possess one or more of a wide range of special abilities including strengths, interests, and qualities in their general intellect; academics; culture; creativity; leadership; physical abilities; and visual and performing arts (Ministry of Education, 2000).

A multi-dimensional construct of giftedness and talent

A major and ongoing paradigm development in thinking about giftedness is a shift from a traditional view of giftedness as a measurable, trait-based construct to a multi-dimensional view that acknowledges that giftedness and talent may be understood, recognised and developed in different ways by different communities and cultures (Ministry of Education, 2002; Tapper, 2012). There is no single 'right' definition of giftedness that holds true across culture and time, and thus recognition of giftedness as a socio-cultural phenomenon is required to guide pedagogical practices (Phillipson, 2007). New Zealand schools tend to favour a multi-dimensional construct of giftedness and talent that acknowledges a diverse range of special abilities across all cultures and socio-economic groups, and places importance in recognising not only potential but also demonstrated performance (Bourne & Sturges, 2006; McDonough, 2004; Learning Media, 2000). Riley et al. (2004) identified six broad areas of giftedness and talent which reflect the breadth of these qualities and abilities including: (1) intellectual/academic; (2) creativity; (3) expression; (4) social/leadership; (5) culture-specific abilities and qualities; and (6) expression through physical/sport. Whilst this inclusive and liberal definition sits well with egalitarian philosophies and beliefs that have shaped New Zealand's cultural identity (e.g., 'Tall Poppy' Syndrome, sporting culture, 'No. 8 wire' kiwi ingenuity), it is important that the multi-categorical concept of giftedness adopted in schools does not create barriers to recognition (or identification) nor lead to disparate provisions, particularly for the exceptionally gifted (Moltzen, Riley, & McAlpine, 2001; Riley, 2000).

Theoretical models of giftedness and talent

According to Borland (1997), giftedness and talent is an ever-changing concept that is socially constructed. Giftedness is something that we confer on, not something we discover in children. Therefore, not only is our primary task to construct the most educationally rewarding and equitable concept of giftedness but it is also essential that sound theoretical models and principles underpin any programmes of learning developed for gifted and talented students (Ministry of Education, 2012). While empirical evidence suggests no dominant model of giftedness, due largely to primary reliance on cognitive ability or academic achievement and standardised forms of assessment for gifted identification (Riley et al., 2004; Worrell & Erwin, 2011), three models are suggested by the Ministry of Education (2002; 2012) and found to be prevalent in New Zealand schools for establishing a school-based definition that acknowledges both potential and performance (Page, 2006; Riley et al., 2004; Riley & Bicknell, 2013). These theories not only include a concept of giftedness and talent (Renzulli, 1986) but also a theory of multiple intelligences (Gardner, 1983; 1993; 1999), and a conceptualisation of the talent development process (Gagné, 1992; Ministry of Education, 2012).

While many theories and definitions of giftedness and talent have been developed, identification is typically the most controversial aspect of gifted and talented programmes in schools (Edwards, 2005; Ministry of Education, 2012). Unlike many other countries, New Zealand does not have a national definition of giftedness and talent, nor does the Government distinguish between ‘*gifts*’ and ‘*talents*’ (McDonough & Rutherford, 2005). Furthermore, one of the unifying themes in research on characteristics of gifted learners is the great diversity among them: each gifted and talented student has unique cognitive and affective strengths, abilities, qualities, and interests (Reis & Sullivan, 2009; Riley, 2011c). How one defines and identifies giftedness and talent should drive the provisions, with identification acting as the ‘mediating link’ between the two (Ministry of Education, 2012).

IDENTIFICATION

The field of gifted research is beginning to move beyond the simplistic notion of finding the perfect identification tool toward a more comprehensive approach. In order to make an enduring classification of children as *gifted* or *not gifted*, there needs to be

an acknowledgement that giftedness involves more than just ability, performance or potential in a domain; and that the classification may shift across developmental periods. The range of conceptualisations communicate that giftedness is a complex and multi-faceted construct, with several highlighting the process of developing potential into gifts, a role in which school-based programmes should be engaging (Worrell & Erwin, 2011). Research on the identification of gifted students can assist educators in making their identification procedures more effective, equitable, as well as assist policy makers in their efforts (Borland, 2014).

A multi-dimensional procedure of identification

Identification of gifted and talented students should not be viewed in isolation but rather as dynamic interrelationships between five key components: (1) the *concept* of giftedness and talent; (2) the *characteristics*; (3) the ongoing process of *identification* co-ordinated within a school-wide approach; (4) educational provision or *programmes* for these students; and (5) ongoing collaborative *self-review* using multi-methodologies (Easter, 2011; Edwards, 2005; Feldhusen & Jarwan, 2000; Ministry of Education, 2002; 2012). The Actiotope Model of Giftedness (Ziegler, 2005) explains giftedness in light of systems theory where constant interchange occurs between the gifted person, their actions, and the environment (Sarouphim, 2012), and thus creating a ‘triadic reciprocity’ effect (as described by Bandura, 1977, 1978, 1986) (Kauffman & Landrum, 2009). Therefore, other mediating variables (e.g., innate personality traits; parental involvement, and exposure to enriching experiences in various contexts) that allow for the demonstration of talent and potential must also be considered (Worrell & Erwin, 2011).

A multi-dimensional procedure of identification employing both qualitative and quantitative methods (e.g., teacher-, parent-, peer-, and/or self-nomination; performance- or curriculum-based assessment and observation; standardised testing; portfolio assessment; responsive learning environment approach; dynamic assessment) should not only increase validity (both construct and predictive validity) but also efficacy and equity. Triangulation of evaluation sources also enables overall judgements to be made about students’ current performance and potential to improve (Borland, 2014; Easter, 2011; Ministry of Education, 2002; 2012). Riley and Bicknell (2013) found the most commonly reported forms of identification in New Zealand

schools are teacher nomination and formal assessment, though there is some variance in types of identification in relation to the area of ability. Nonetheless, there has been an increase in formal identification across all six areas of ability in New Zealand schools since the Riley et al. (2004) investigation.

Culturally responsive environments: Addressing the needs of all gifted students

Culturally responsive environments are the most appropriate way of generating effective identification practices. Although there is recognition of the needs of culturally diverse gifted learners in gifted education policy in New Zealand, school-based definitions often fail to embody Māori perspectives and values (Ministry of Education, 2012; Weir, 2003). Furthermore, limited methods of identification can potentially exclude and overlook students from under-represented groups, particularly Māori and ethnic minority groups (Riley et al., 2004; Riley & Bicknell, 2013). Therefore, the enormous potential inherent in Māori and Pasifika students is often not realised (Riley et al., 2004). Culturally diverse students' needs are not only met at the cognitive level, but also need to be met at the affective and spiritual level (Bevan-Brown, 2000; Niwa, 1998/1999). Research findings indicate the main barrier to culturally responsive identification of Māori students is the lack of teacher expertise and knowledge (Scobie-Jennings, 2013).

Bevan-Brown (2011) advocates a holistic Māori conceptualisation whereby true giftedness in a Māori sense relates to those qualities grounded in the cultural cornerstones of Māoritanga, in particular: *manaakitanga* (kindness, hospitality, respect); *aroha-ki-te-tangata* (love for others); *whanaungatanga* (familiness); *wairua* (spirituality); and *awhinatanga* (helping, assisting, guiding) (Bevan-Brown, 2004; Jenkins, Moltzen, & MacFarlane, 2004). In addition to an understanding of Māoritanga, it is paramount that trusting reciprocal relationships exist between the home and school, and that kaumātua (elders) and kōhanga reo kaiako (early childhood teacher) are also included in the identification process (Bevan-Brown, 2009; Ministry of Education, 2012). Once a definition is agreed upon, the next step is deciding on the goals and optimal outcomes of the gifted and talented programme (Worrell & Erwin, 2011).

PROVISIONS

The overarching vision for providing for gifted and talented students in New Zealand schools that guides the core principles for supporting achievement and well-being states that “gifted and talented learners are recognised, valued, and empowered to develop their exceptional abilities and qualities through equitable access to differentiated and cultural responsive provisions” (Ministry of Education, 2012, p.10). As there is no single tailor-made provision for gifted and talented education, a continuum of approaches and models that are differentiated and matched to individual learning needs, in line with New Zealand policy documents and initiatives (including *The New Zealand Curriculum*; *Ka Hikitia*; *Pasifika Education Plan 2009-2012*; and *Success for All – Every School, Every Child*) is recommended as best practice (Easter, 2011; Ministry of Education, 2004; 2012; Riley, 2011c; Taylor, 2001). Aligned with broader national educational directives, the gifted and talented education policy also emphasises inclusive teaching practices to meet the needs of students (McDonough, 2004; Ministry of Education, 2012; Weir, 2003).

Differentiated programmes for gifted and talented students

An optimal learning environment must be provided to allow gifted and talented students to thrive and maximise their potential in both academic and social contexts (Luus & Watters, 2012; O’Reilly, 2006). All provisions should ideally be qualitatively differentiated and delivered through a combined approach of enrichment and acceleration (Ministry of Education, 2012; Riley et al., 2004). Students who are identified require curriculum compacting (e.g., some preliminary school activities may be eliminated or reduced for students who learn at a faster pace) (Renzulli, 1984; Winebrenner, 2001) and differentiated programmes to meet their needs (Ministry of Education, 2012). Students should also be afforded the opportunity to receive flexible and differentiated education at any point that giftedness or the potential for giftedness becomes apparent (Renzulli, 1984; Worrell & Erwin, 2011).

Differentiation means that adjustments are made to the content, processes, and products through ongoing assessment to better suit individual students’ strengths and needs (Ministry of Education, 2012; Riley, 2011c). Five elements for effective differentiation within a culturally responsive learning environment include: (1) *content* (e.g., use of more advanced, complex texts and resource materials); (2) *process* (e.g.,

increased learning time on more complex and abstract tasks using a learning styles or multiple intelligences approach); (3) *product* (e.g., guided to produce “real-life products for appropriate audiences”); (4) *environment* (e.g., changing the actual place where students work, allowing flexible time limits); and (5) *assessment* (e.g., consistent opportunities to demonstrate previous mastery before a particular unit of work is taught) (Ministry of Education, 2012; Riley et al., 2004; Winebrenner, 2001). The curricular models, therefore, act as a framework for provisions whereby an eclectic approach can be taken in a responsive environment (where adaptation lies with the teacher, the individual students, and the entire community of learners) in order to capitalise upon strengths and interests (Tomlinson, 2004 cited in Riley, 2011c).

Curriculum models

The goal in selecting and adapting curriculum models (e.g., Enrichment Triad Model) or suitable frameworks (e.g., Bloom’s Taxonomy) is to create educational programmes that enhance the strengths and abilities of gifted and talented students, and that reflect the school’s definition and identification policies and procedures (Learning Media, 2000). The core principles underpinning gifted and talented education (including the Treaty of Waitangi, responsiveness, cultural diversity, and inclusion) should also guide the development of a holistic and inclusive educational programme based on meeting the individual cognitive, social, emotional, creative and cultural needs of gifted learners in New Zealand schools (Ministry of Education, 2012; Riley, 2013).

There are several curricular models for school-wide improvement in gifted and talented education that provide a framework from a strong theoretical and research base for providing differentiation in relation to content, process, and product modifications (Riley, 2011c). Five curriculum models that have been used in New Zealand schools include: (1) the Enrichment Triad Model (Renzulli, 1977) or Schoolwide Enrichment Model (and Secondary Triad Model adapted for secondary schools) (Renzulli & Reis, 1985); (2) the Autonomous Learner Model (Betts, 1985); (3) the Integrated Curriculum Model (Van Tassel-Baska, 1997); (4) the Parallel Curriculum Model (Tomlinson, Kaplan, Renzulli, Purcell, Leppien, and Burns, 2002); and (5) the *REACH model* based on New Zealand’s child-centred approach (Cathcart, 2005). All of these models support gifted and talented students to develop and use metacognitive knowledge and skills, and higher order thinking in rich tasks that are meaningful to them (Ministry of Education, 2012).

Of the five models, the Enrichment Triad Model appears to be flexible, practical and perhaps the most widely used curriculum model in gifted education. A valid criticism of this model is that it is focussed predominantly on enrichment (Ministry of Education, 2012). Caution must also be taken with models that have been developed overseas (e.g., curriculum units in the Integrated Curriculum Model closely aligned to the United States context) (Riley, 2011c), as well as recent models that carry limited empirical evidence (e.g., the Parallel Curriculum Model) (Ministry of Education, 2012).

Pyryt's (2004) parsimonious model (Pyryt's Ps) encapsulates effective acceleration and enrichment practice with five key factors: (1) *pace* (accelerated pace); (2) *process* (developing higher-order thinking skills); (3) *passion* (independent inquiry to pursue areas of interest); (4) *product* (represent knowledge gained in multiple ways); and (5) *peers* (e.g., opportunities to socialise and work collaboratively with similarly gifted peers) (Houghton, 2014). All of which represents the promise that the needs of gifted students can be met in regular classrooms through all stages of education if appropriate accommodations are made (Pyryt & Bosetti, 2006). According to Riley and Bicknell (2013), whilst most schools in New Zealand have not adopted these curriculum models, it is important to note that the models can be used in tandem with and to complement the New Zealand curriculum.

Classroom and school-based provisions

Classroom-based provisions include ability grouping; tiered instruction; independent or small group study; differentiated planning; Individualised Education Plan (IEP); curriculum compacting; learning centres; and specialist teacher. New Zealand classroom-based practices were reported to be dominated by ability grouping, whilst independent study was reported as common practice and differentiated teacher planning on the rise (Riley & Bicknell, 2013). School-based provisions include acceleration; competitions; withdrawal programmes; mentorships; cross-age grouping; external exams; clustering; and web-based learning opportunities (Riley, 2011c; Riley & Bicknell, 2013). The most commonly reported New Zealand school-based provision was withdrawal programmes, competitions and cross-age grouping, with a marked increase reported in the use of competitions, mentorships and web-based pedagogies (Riley et. al, 2004; Riley & Bicknell, 2013). Provisions for gifted and talented students are typically based on: (a) grouping and class organisation (e.g., cluster grouping,

selective programmes, streamed classes, mixed ability classes); (b) social interactions (e.g., collaborative learning); and (c) development of new skills and strategies (Bourne & Sturges, 2006). As gifted students learn better in homogenous groups, cluster grouping (grouping gifted students together), while simultaneously grouping other students in heterogeneous groups, provides optimum grouping structure (Winebrenner, 2001).

In the Education Review Office (ERO) National Report (2008), provision for gifted and talented students was found to be predominantly in English, Mathematics and Science. Core subjects are also typically streamed. Reported challenges for secondary schools included moving beyond acceleration and undertaking assessment early; broadening the scope of provision to non-academic gifted and talented students; and shifting from a departmental approach to cross-curricular provision to suit multi-talented students. Whilst the majority of schools in New Zealand prefer to use a combination of acceleration and enrichment provisions, acceleration on its own is most commonly reported at secondary schools (Riley et al., 2004; Riley & Bicknell, 2013).

Acceleration and enrichment

Acceleration as a curriculum delivery model moves high-ability students through an educational programme at a rate faster and/or at an age younger than typical (Assouline, Marron, & Colangelo, 2014; Macleod, 2004). Despite some educator and parent concerns about the effects of acceleration on the social and emotional well-being of accelerants (Siegle, Wilson, & Little, 2013), favourable empirical studies for the efficacy of acceleration and enrichment practices have appeared as early as the 1930s and have continued to accumulate with positive outcomes reported including academic achievement results, and social and psychological gains (Assouline, Marron, & Colangelo, 2014; Robinson, Shore, & Enersen, 2007; VanTassel-Baska, 2004). Acceleration is also one of the more common provisions offered in New Zealand secondary schools (particularly in boys' schools) with common implementation consisting of compacting three years' study into two years; skipping one year's study; offering one or more NCEA Level 1 subjects in Year 10; separate subject acceleration; whole class acceleration or streaming; vertical acceleration (e.g., sitting both NCEA Level 3 and Scholarship); and early entrance to tertiary institutions (Macleod, 2004). According to VanTassel Baska (1998), the most effective curriculum model for gifted

learners has been developed on acceleration principles for advanced secondary level students.

Enrichment refers to horizontal broadening of curricular aims and objectives, while acceleration is a vertical movement through those objectives (Riley, 2011c). Enrichment has multiple interpretations including: (a) activities or assignments (e.g., extensions of classroom work); (b) programming approaches (e.g., afterschool programmes); curricula (e.g., modified, enhanced, or differentiated content); (c) skills development (e.g., cognitive including critical and creative thinking skills, affective, research, communication, organisational skills); (d) academic competitions; and (e) systems and models (e.g., programming models for gifted and talented learners including Reis & Renzulli, 2009) (Gubbins, 2014).

Withdrawal programmes and special classes

The 1980s saw the rapid rise in popularity of withdrawal programmes (Moltzen, 2011) which continue to be utilised today in New Zealand schools as a way of extending and enriching the curriculum (Macleod, 2004; Riley & Bicknell, 2013). In withdrawal programmes, groups of students of similar interests or abilities leave their regular classroom setting for a specified period of time to work with a specialist teacher to meet their needs. This may involve exploration of a range of topics in greater depth and breadth than is often possible in a typical classroom (Ministry of Education, 2012). Among a number of reported positive effects on students' learning behaviours (including achievement, motivation, independent thinking and creativity), a key advantage is the meeting of like minds through opportunities to connect with other gifted and talented students (ERO, 2008).

Special classes for gifted and talented students offer broader depth and complexity usually at a faster pace. Telescoping (e.g., when students complete three years' NCEA work in two) can sometimes complement these classes. To ensure successful qualitative differentiation, a skilled teacher needs to work within full- or part-time classes for gifted and talented students. Scholarship classes in secondary schools are an example of such classes (Ministry of Education, 2012).

Competitions

Enrichment opportunities most accessible to educators, that serve the dual of identification of creative and innovative abilities and talents as well as provision for the development of gifted students, are competitions. Well facilitated participation in competitions (e.g., Future Problem Solving New Zealand; Science Olympia NZ; Ngā Manu Kōrero) not only enables opportunities for gifted students to pursue their interests and showcase their abilities but also to receive acknowledgement and recognition for their talents (Ministry of Education, 2012; Riley, 2011a). Six practical steps outlined by Riley and Karnes (2007) that schools can take to facilitate student involvement in competitions include: (1) gathering information; (2) aligning competition goals to curricular goals; (3) embedding competitions across a continuum of approaches; (4) analysing curriculum models to facilitate competitions; (5) developing specific competition goals; and (6) identifying students and teachers for participation (Riley, 2011a).

Mentoring

Mentoring is considered among the most effective pedagogical measures, yet it is rarely used in gifted education (Grassinger, Porath, & Ziegler, 2010). Mentorships or effective symbiotic relationships with an experienced older student or adult with similar interests and abilities carries not only benefits (including expertise and guidance in the field of endeavour) for the student participants (Riley & Moltzen, 2011) but also addresses the their learning and social-emotional needs (Cutler, Riley, MacIntyre, & Bicknell, 2010; Ministry of Education, 2012). The mentor approach may also be appropriate for nurturing giftedness in Māori students, taking either a *tuakana-teina*¹ approach within the school or drawing on an appropriate person in the local Māori community (e.g., Kaumatua or Kaitakawaenga) (Ministry of Education, 2012). Mentoring not only allows for full use of the ‘Learning Triad’ (modelling; instruction; and provision of learning opportunities) but also satisfies the ‘Big Four’ effective learning processes (improvement-oriented learning; individualisation; feedback; and practice). Mentoring can promote exceptional development of the whole actiotope of a gifted individual (Grassinger, Porath, & Ziegler, 2010).

¹ *Tuakana-teina* refers to the relationship between an older (*tuakana*) and a younger (*teina*) person and is specific to teaching and learning in the Māori context.

Evaluation and self-review

Self-review that is ongoing, systematic and comprehensive of the school's provision for gifted and talented students is essential in order to ensure accountability and improvement. Riley and Moltzen (2011) suggest asking three key questions: (1) what is going on; (2) what is working; and (3) how do we know? Furthermore, a robust collaborative approach, that utilises a range of both quantitative and qualitative methodologies, not only allows for the self-review process to be developed together but also increases validity by providing a wide range of perspectives (including those of teachers, students, and whānau) to ascertain effectiveness of policy and provisions. To ensure ongoing improvement of the key components (definition, characteristics, identification, programmes, self-review) and to the coherence between the components, each aspect of the school's provisions needs to be reviewed and evaluated as well. If the school chooses to use a particular curriculum model to develop their programme, their self-review process should align with the theories that underpin that model (ERO, 2008; Ministry of Education, 2012). "The Cultural Self-Review", as described by Bevan-Brown (2003), may also be used as part of a broader school review to evaluate how well the school is providing for gifted minority students.

"Effective provision or opportunities for gifted and talented students requires professional development for teachers and school leaders. Just as the programme for students needs to be reviewed and evaluated, so too does the professional learning and development for teachers" (Ministry of Education, 2012, p. 83). Guskey (2002) proposes a model that consists of five critical levels of evaluation: (1) participants' reactions; (2) participants' learning; (3) organisational support and change; (4) participants' use of new knowledge and skills; and (5) student learning outcomes (Guskey, 2000; Ministry of Education, 2012).

Barriers to implementation and sustainability

Despite sound theory and research in gifted and talented education, Riley et al. (2004) found that a gap between theory and practice exists in New Zealand schools. Potential barriers such as time constraints, lack of funding, resources, and on-going support and professional development can also impede awareness and utilisation of sound theory and research. Limitations of certain models (e.g., ability to identify students who have above average ability but are yet to find an area of interest in which

they excel) should also be considered when developing a holistic synthesis of information about the student's ability (Page, 2006). Furthermore, it is important to remember that concepts of giftedness and talent are sensitive to time, contexts, and underpinned by social and cultural values (Borland, 1997; McAlpine, 2004).

CHAPTER 3

METHODOLOGY

Introduction

This chapter outlines the multi-methodology approach and rationale; key research questions; the setting of this case study school; participants involved; and a description of the data collection methods, process and analysis employed. The ethical review process and specific considerations pertinent to this research are also detailed.

Multi-methodology case study design approach and rationale

Historically, trends in the literature indicate that gifted education researchers have primarily utilised dominant mono-methods in their study designs. However, embedding of both quantitative and qualitative research approaches within the same framework has become increasingly prominent (Onwuegbuzie, Collins, Leech, & Jiao, 2010). Proponents of this methodology argue that quantitative methods do not provide the researcher opportunities to explain the ‘how’ and ‘why’ in terms of interpreting research findings, whereas qualitative research designs tend to use small, non-random samples that may limit the generalisation of research findings. Therefore, the four major rationales for mixed-methodology approaches include: (1) participant enrichment; (2) instrument fidelity; (3) treatment integrity; and (4) significance enhancement.

Identifying the rationale also helps the researcher to develop appropriate research questions which play a central role in the mixed-methodology research process: a role that is interactive, emergent, fluid and evolving. Furthermore, mixed-methodology approaches serve to better address the prevailing challenges or barriers that characterise the field of gifted education research (Fraenkel, Wallen, & Hyun, 2012; Leech, Collins, Jiao, & Onwuegbuzie, 2011; Onwuegbuzie et al., 2010).

‘Case study’ is a term that can be used both for defining the unit of study and also for the research process. The case study approach answers the ‘how’ and ‘why’ by providing detailed descriptive data from multiple perspectives from a specific setting, and therefore serves as an ideal methodology when holistic, in-depth investigation is needed (Riley & Moltzen, 2011; Yin, 2009). Case studies also play a pivotal role in theory development (Blatter & Haverland, 2012; Moon, 1991) and can also directly

influence policy, procedures, and future research (Hancock & Algozzine, 2011). Of the three major types of case study research designs (exploratory; explanatory; and descriptive), qualitative descriptive benefits the field of gifted education as it presents a complete description of a phenomenon within its context (Hancock & Algozzine, 2011; Sue & Ritter, 2012). Unlike quantitative research designs that are selected and rigidly implemented, qualitative plans are created to meet the purposes of their inquiries and are adapted, as required, during the research process (Merriam, 1998; Mendaglio, 2003).

A multi-methodology framework modelled on a replication of the investigation conducted for the New Zealand Ministry of Education by Riley et al. (2004) was utilised for this case study research. The overarching rationale was to gain deeper insight and understanding of how one boys' secondary school in New Zealand identifies and provides for gifted and talented students. This case study approach is similar to that of a zoom lens: enabling a 'close up' picture of gifted and talented education, sharper than that created by a literature review alone.

Key research questions

The following key research questions guided this case study:

- What is the school's journey of gifted and talented education?
- How is 'gifted' and 'talented' defined?
- What does identification entail for gifted and talented students?
- How does this school provide for gifted and talented students?
- How is the special character four cornerstone philosophy of this school incorporated into the gifted and talented programme? Is equal emphasis placed on all four cornerstones?
- How does the school evaluate the effectiveness of identification and provisions?

Setting

This case study school was of particular interest to the researcher due to its special character, and reported reputation as a top performing secondary school with a well established gifted and talented programme. The case study school is a Decile 10, integrated Presbyterian school for Year 7 to 13 boys, situated in the North Island since the early 1950s with a current roll of 496 students. The school's ethnic composition comprises of: New Zealand European/Pākehā (85%); Māori (10%); and other ethnic

groups (5%) (statistics based on School ERO Report, 2014). A balanced education in a Christian setting emphasising excellence is reflected in the mission statement and special character four ‘cornerstones’ of the school: *Academic Excellence*; *Sporting Endeavour*; *Cultural Participation*; and *Christian Dimension*. In addition, this school’s vision espouses a relevant and engaging curriculum; academic performance; developing “good men”; excellence in sporting and cultural dimensions; and pride in and respect for self, others and the school.

Participants

Upon receiving Massey University Human Ethics Committee (MUHEC) approval (see Appendix A), permission from the Rector of this school was sought by formal letter and appointment to commence this case study research (see Appendix B). As part of the initial approach, a general Information Sheet (see Appendix C) and Participant Consent Form (see Appendix H) was given to the Rector to outline the main aims of the research and procedures. Once informed consent was granted, recruitment of participants was carried out independent of the Rector to avoid any potential bias.

Data collection methods, process, and analysis

A summary of the data collection methods used in this case study is shown in Table 1. An explanation and rationale for each data collection method and participants involved follows.

Table 1. *Summary of data collection methods and participants involved*

Data Collection Method		Participants
<i>Interview</i>	Individual Interview	Rector; Assistant Rector (Junior School); Assistant Rector (Senior School); GATE Coordinator
	Staff Focus Group	Head of Department (HoD) Arts/Head of Arts Faculty; HoD Languages; HoD Science; HoD Physical Education/Health & Head of House; HoD Music; Intermediate School Teacher; and Technology Teacher.
	Student Focus Group	Year 10 withdrawal programme students (n=8) Year 13 Philosophy group (n=6)
<i>Observation</i>	Anecdotal recording form	Year 10 withdrawal programme (n=8) Year 13 Philosophy group (n=6)
<i>Survey</i>	Online Questionnaires	Staff (n=7) Students (n=17) Parents (n=23)
<i>Document/ Data Analysis</i>	Policy/Implementation/ Practice Documents Student Data/Results	Supplied by the GATE Coordinator and Assistant Rector (Senior School)

A two-fold content analysis approach was applied to analyse the qualitative data gathered in this study. First, data was analysed using an inductive approach (driven by pre-existing themes related to the key research questions) and second, deductive analysis (themes that emerged during the review and analysis of data gathered) was applied in order to confirm or refute existing theories whilst maintaining the integrity of participant voice (Adams, Khan, Raeside, & White, 2007). Triangulation of multiple sources where possible (e.g., between different participants, across various data collection methods) also assisted in validating the findings (Fraenkel, Wallen, & Hyun, 2012).

Interviews

Interviews are one of the most common methods of data collection that uses direct interaction between researcher and participants to attain rich, personalised information (Hancock & Algozzine, 2011). Interviews can be conducted to complement, complete, further develop, corroborate, compensate for, and diversify the first phase of the study (Tashakkori & Teddlie, 2008). Semi-structured interviews using pre-determined but flexibly worded questions are particularly well suited for case study research (Hancock & Algozzine, 2011). Thorough preparation before entering the setting to conduct the interviews is crucial for the researcher including identifying potential key informants and gaining preliminary ideas and pertinent background information about the prevailing research questions (Gideon & Moskos, 2012).

Focus group interviews involve blending techniques from group process theory and qualitative research, and can be used to gather in-depth knowledge about attitudes, perceptions, beliefs and opinions regarding a specific topic. This opinion sharing process allows researcher observation of verbal discourse and non-verbal cues about individual views and group dynamics to be obtained. Focus groups can also be used to generate constructs or hypotheses; in-depth understanding of phenomena of interest; and clarify the meaning of certain behaviours. Furthermore, the researcher can also obtain data to inform other quantitative methods of the research (e.g., questionnaire development). Advantages of this method include: (a) direct, intensive contact with individuals; (b) in-depth data; (c) ability to moderate and encourage interaction with other participants; (d) less-intense environment; (e) facilitates greater anonymity and freer disclosure; and (f) minimises discrimination (Then, Rankin, & Ali, 2014).

Individual interviews

All individual interview and focus group participants were given a specific Information Sheet and list of questions corresponding to their interview (see Appendix, D, E and F) and a Participant Consent Form (see Appendix H) prior to the interview for their perusal and to gain informed consent. The interview questions were informed by the literature review and the key research questions in design, and the interview process guided by the discussion that ensued with the participants. The semi-structured individual in-depth interview included 14 pre-determined questions (adapted from Riley et al., 2004 and Riley & Bicknell, 2013).

Focus groups: Staff and student

Eight staff members were invited to participate in the Staff Focus Group, and seven accepted this invitation. The composition of this group provided a good cross-section of the school staff (five of whom are Heads of Department) as well as good coverage of the main subject areas: Arts; Languages; Science; Physical Education; Technology.

The current Year 10 withdrawal programme students (n=8) and Year 13 Philosophy group (n=6) were invited to participate in two separate Student Focus Group Interviews. These two groups of students were of particular interest to the researcher as they were involved in provisions that typify the gifted and talented programme at this school. Furthermore, these two particular groups also provided a deeper insight into the beginning stages through to the final year of the gifted and talented journey for students at this school. All focus group participants were also asked to sign a Confidentiality Agreement Form (see Appendix I) prior to ensure that any information pertaining to this study would not be disclosed, retained or copied.

Audio recordings were made for all interviews to allow for transcription, review and consequent analysis. External transcribers signed a Confidentiality Form for Transcribers (see Appendix J). Individual interview participants were also given an opportunity to review a fully copy of their unanalysed transcript and to make any emendations to increase the reliability and validity of the reported findings.

Observations

Observations enable the researcher to describe existing situations using the five senses, providing a “written photograph” of the situation under study (Erlandson, Harris, Skipper, & Allen, 1993). Furthermore, observation can be used to help answer descriptive research questions, to build theory, or to generate or test hypotheses. Therefore, according to DeWalt and DeWalt (2002), observation may not only equip the researcher with a better understanding of the context and phenomenon under investigation but also serve to increase the validity of the study.

Observations – Year 10 withdrawal programme and Year 13 philosophy group

Three separate observations of the Year 10 withdrawal programme and Year 13 Philosophy group in action were scheduled in consultation with the GATE Coordinator and adhered to the school’s usual protocol for activities of this nature and good ethical practice. Prior to the observations, parents of these students were contacted via email with a Parent Information Sheet (see Appendix G) to provide details about the intended observations and other components of this research that may involve both them (as parents) and their son. Anecdotal recordings were made for each of the observations with a specific focus on how students’ needs are met in these two provisions. The lessons were not disrupted in any way to minimise any potential effects on the participants due to observer presence (e.g., changes in behaviour or teacher-student interactions).

Survey research methodology

Survey research provides useful information in the evaluation of programmes and practices in schools (Creswell, 2012). Surveys are self-report data collection instruments that can be administered by various modes including face-to-face or telephone interviewing, self-administered mail questionnaires, and online surveys (Sue & Ritter, 2012). Modifying an existing survey that has proven to provide sound data is recommended (Cresswell, 2012; Tuckman & Harper, 2012). Furthermore, particularly in the case of a self-administered survey, the appearance of the questionnaire is crucial to the overall success of the study (Fraenkel, Wallen, & Hyun, 2012).

In explicating total questionnaire design, Fowler (2002) emphasised that taking a holistic view of the entire survey process is critical to the success of a study as this

approach increases the likelihood of collecting data that adequately address the research objectives while balancing time and cost constraints (Sue & Ritter, 2012). In a well-constructed survey, the sample studied represents the target population, and the information collected represents the concepts of interest. Conversely, a poorly written one (e.g., with an incomplete introduction, complicated phrasing, lacking response alternatives), however, can lead to both response and non-response bias which may further translate to reduced validity and generalisability (Stoop & Harrison, 2012).

Online surveys have been touted as the wave of the future, with supporters citing fast response rates, low cost, and easy fielding as major benefits (Manzo & Burke, 2012; Nardi, 2014; Sue & Ritter, 2012). Not only are online surveys inexpensive to administer and environmentally sound but they also allows for efficient data collection (Andres, 2012). Self-administered surveys also allow for completion at leisure (giving time to consult records if necessary and removing any pressure to disclose information to an interviewer), and therefore responses may be more accurate, thoughtful and reflective (Andres, 2012).

Staff, student, and parent questionnaires

All teaching staff (n=52) were invited to participate in the online Staff Questionnaire. Of the 52 possible staff respondents, seven questionnaires (13.46%) were returned: six submitted online and one on paper copy. Students listed on the registers (2008-2015) and their parents (with an email contact) were invited to participate in the online Student and Parent Questionnaires. Of the 161 possible student respondents, 10.55% (n=17) completed the questionnaire. Of the 124 possible parent respondents, 18.54% (n=23) completed the questionnaire (see Appendix N for student and parent questionnaire respondent distributions).

The three separate Questionnaires (Staff, Student and Parent) were designed using Google Forms as this was a familiar platform for the school. The questionnaires were informed by the literature review and emerging themes and specific areas of interest that unfolded from the individual interviews in its design to acquire staff, student and parent voice on the key research questions. An overview of the research and purpose of the questionnaire was provided at the start of each questionnaire, and therefore completion assumed consent to participate. The Staff Questionnaire consisted of 74 items adapted from the questionnaire utilised in Riley et al., 2004 (see Appendix

K). Prior to distribution, the researcher requested an opportunity to speak to staff to provide an overview of this case study and purpose of this questionnaire. To address any potential bias towards certain demographics and other common issues (e.g., technological problems and security concerns), a paper copy of this questionnaire was also made available. By using this mixed-mode approach, whereby more than one survey format is utilised, response rates should be enhanced (Andres, 2012; Creswell, 2012). The Student Questionnaire consisted of 31 items (see Appendix L) to probe first-hand experience of identification and provisions, and the Parent Questionnaire consisted of 40 items to ascertain parent perspectives on their son's identification and involvement in gifted and talented programmes at this school (see Appendix M).

Google Forms provided a summary of responses for each questionnaire and a starting point for analysis. In this summary, closed answers were reported as quantitative data (e.g., in numbers or percentages for each possible response). Open-ended answers were recorded verbatim in no particular order. Following appropriate analysis, data was recorded in the Results Chapter either as a narrative description (including use of verbatim participant quotes) and/or in tabular form to best capture participant voice and summation of the answers to the key research questions.

School documents and student data

School documentation and student data supporting the school's practices in identification and provisions was requested for review and analysis. This not only provided additional detail and depth to the research findings but also allowed for triangulation of information gleaned from other data collection methods (see Appendix O for a summary of school documents and student data utilised in this study).

Summary of ethical review process and considerations

The "Code of Ethical Conduct for Research, Teaching and Evaluations involving Human Participants" was directly referred to in the completion and submission of a full Massey University Human Ethics Committee (MUHEC) Application for this case study. Despite this study being deemed low risk and no more than is normally encountered in daily life in terms of causing physical or psychological harm to participants, it was agreed (in consultation with supervisors) that it would be desirable to seek additional feedback and approval from MUHEC. This application was

approved by MUHEC: Southern B and assigned an approval number 14/48 (see Appendix A).

This case study adhered to the intentions and three ethical principles as outlined in the Code: '*respect for persons*'; '*beneficence*'; and '*justice*'. Specific ethical considerations for this case study included: (a) research goals should both benefit the field and minimise the social harm to the participants; (b) ensuring accuracy and avoiding falsification, fabrication, suppression, or misinterpretation of data collected; (c) informed and voluntary consent must be obtained from all participants. Participants were fully informed about the nature of this case study via an Information Sheet and Participant Consent Form relevant to the part of the research that they were participating in to ensure that they understood the parameters of the research and participation; and (d) all possible steps were taken to ensure the anonymity, confidentiality, dignity and welfare of all participants (including the right to decline participation or withdraw from the case study) as well as those who may be affected by the results of this research. Given the unique nature of this school, participants were also informed (under the heading of 'Anonymity and Confidentiality' in the Information Sheet) that it would not be possible to fully conceal the identity of this school in the presentation of this thesis report.

CHAPTER 4

RESULTS

Introduction

This chapter begins with the school's journey in gifted and talented education to provide a backdrop for the findings pertaining to the key research questions that guided this study. Staff, student and parent perspectives are interwoven throughout to enrich the presentation of the findings.

The school's journey

The 'academic' aspect of the programme started in the mid-1990s when the Senior Management Team looked at how they could identify and develop Year 10 students who were *academically advantaged and not getting the stimulus they needed* (Assistant Rector Senior School Interview, 25.02.15). The Senior Management Team drove the school's development when the National Administrative Guidelines (NAG) 1 (c) iii came into effect in January 2005.

Because we had the accelerate pathway for the kids established, it seemed logical to have some extension for some of those kids that were clearly going to get on that barrow (Assistant Rector Senior School Interview, 25.02.15).

The next phase saw the formation of a GATE Committee and the appointment of a GATE Coordinator.

Appointing [the GATE Coordinator] as a person with responsibility was a big step forward (Assistant Rector Senior School Interview, 25.02.15).

The GATE Coordinator was provided the opportunity to undertake professional development (Post-graduate Diploma in Gifted and Talented Education) to further inform her role and responsibilities. The papers completed provided valuable background information for the establishment of a programme for gifted and talented students, particularly in the area of independent study (Review, 2009). This was followed by school-wide professional development which was initially provided by a university adviser (in 2007/2008) but by the GATE Coordinator since.

The biggest thing is to get professional development ... I don't think you can do this job [GATE Coordinator] if you're kind of winging it on what your assumptions and misconceptions about gifted students are (GATE Coordinator Interview, 29.04.15).

As a result of school-wide consultation and discussion, the staff agreed on a school definition of 'gifted and talented' and a multi-categorical form of identification. With the assistance of the university adviser, the school also developed their own version of the National Template (found in the Ministry of Education Publication *Gifted and Talented Students: Meeting their Needs in New Zealand Schools*, 2012) to guide their provisions and review processes.

Policy: Provision for gifted and talented students

The Rector (in 2007) stated that there was a need to have an integrated policy for the programme. Visits to other schools and coordination with other gifted and talented facilitators were also viewed as necessary steps to drawing up the school's policy (Meeting Minutes, 18.09.07; Review, 2008). The school policy comprises of the following components: Policy Statement; Rationale; Delegation; Definition; Procedures; Review; and is signed off by the Chairman of the School Council (Policy, 2007; 2008; 2012). According to school documentation, in drawing up the policy and programmes for gifted and talented students, they have incorporated much of the current thinking about intelligence and giftedness but overlaid it with the principles which are fundamental to the special character of the school (Brochure for Parents).

The most current policy (2012) states that: "the [School] Council (Board of Trustees) will provide opportunities for students of all abilities to develop to their full potential". The rationale states: "Gifted and talented learners are those who have the ability to perform at a level significantly beyond their chronologically aged peers in one or more areas of [school] life. The curriculum and organisation of the [school] must provide opportunities for each student to learn at a pace which is appropriate to them, and to develop their maximum potential" (Policy, 2007; 2008; 2012). Whilst the policy statement, rationale, and definition have essentially remained the same since 2007, emendations have been made to the procedures section (since 2008) including additional responsibilities assigned to the GATE Coordinator pertaining to the maintenance of individual files for boys identified on the gifted and talented register; for the review process to include evaluation from students, staff, and parents; policy review

period shifting from annually to every three years in line with other school policies; and in 2012 the Rector was no longer specified on the committee.

Coordination and organisation of the gifted and talented programme

The current GATE committee consists of the Assistant Rectors (Junior and Senior School) and the GATE Coordinator who have the responsibility for identifying, coordinating and formulating policies for gifted and talented students at this school (Policy, 2012). All seven staff questionnaire participants indicated there is a GATE Coordinator at this school with three supplying the correct person's name but only two respondents (28.6%) were aware of the committee. Six parent respondents (26.08%) correctly identified the GATE Coordinator, and 34.78% (n=8) did not know. Two parent respondents (8.7%) felt well-informed about the programme at school; 65.2% (n=15) indicated 'no'; and 26.1% (n=6) 'to some extent'. Thirteen respondents (56.52%) recalled receiving a letter (e.g., in Year 9 and 10); 19.04% (n=4) indicated 'none'; and one respondent was 'unsure'.

Twenty one parent respondents (91.30%) provided a response about information they would like to receive about the programme including: (a) more information (e.g., *I would have liked to have received 100% more information about the programme ... the outcomes ... [did he] get anything out of it as he was away from regular classes to do activities. Has the programme stopped or is it still going, I don't know* (Year 12 parent); *Anything, didn't know it existed, been at the school ten years* (Year 13 parent); (b) the school's policy (e.g., clarify why it exists); (c) how students qualify for the programme (e.g., whole 'A' stream class); (d) what the programme entails for each Year group (e.g., Term/Year plan outline, content covered in the withdrawal time, workload, what happens with missed class work, duration of the programme); (e) parental support; (f) progress updates/outcomes on how their son is enjoying and/or achieving in the programme (e.g., included in the standard school reports); (g) opportunities available (e.g., Scholarships); and (h) a parent information evening was also suggested to answer questions: *Why selected? What was identified? What does this mean for him? Does he get a choice? Can he work on things passionate to him? How am I informed of his progress? Is this a formalised class? Does it carry over year to year? Does it allow for musicians and artists to be identified?* (Year 11 parent).

DEFINITION

The school's definition is influenced in general by the principles outlined in the Ministry of Education publication *Gifted and Talented Students: Meeting their Needs in New Zealand Schools* (Learning Media, 2000) and in particular the multi-categorical approach of theorist Gagné (1995) to define gifted and talented students as those learners who have the potential to achieve outstanding performance among their age-group peers. This definition recognises: (a) that the terms 'gifted' and 'talented' should not be used synonymously but should distinguish between natural 'gifts' or aptitudes which may be undeveloped and systematically developed skills in particular areas (e.g., 'talents'); (b) students who have particular aptitudes or gifts but have not yet developed those gifts into talents; and (c) that talents may lie within a very broad range of talent areas.

[GATE Coordinator] has a particular model that she follows ... it's across a broad range of abilities and giftedness (Rector Interview, 30.03.15).

The school acknowledges that the areas of giftedness may be diverse and range from outstanding musical ability to leadership on the sports field or a gift for photography (Rector's Newsletter, July/August 2015), and therefore defines gifted and talented students as those who have the potential to achieve outstanding performance in one (or more) of the following areas (see Table 2):

Table 2. *Areas of Giftedness*

Areas of Giftedness	Descriptor
<i>Academic</i>	<i>Refers to language, social sciences, mathematics, science or technology.</i>
<i>Visual/Performing Arts</i>	<i>Refers to music, drama, or visual arts.</i>
<i>Sporting</i>	<i>Refers to physical ability and skills as evidenced through sport or health and physical education programmes.</i>
<i>Creativity</i>	<i>Refers to general ability to problem-solve as well as innovative thinking.</i>
<i>Leadership</i>	<i>Refers to inter-personal abilities and qualities, which enable students to act in leadership roles.</i>
<i>Cultural</i>	<i>Refers to qualities valued by the students' cultural or ethnic group including language, cultural identity, traditional arts and crafts and service to the culture.</i>

Note. The category 'Cultural' was re-named 'Cultural Empathy' in 2008 to distinguish it from the cultural activity of the school in general (Meeting Minutes, 01.05.08).

Staff perspectives on the definition

The GATE Coordinator described giftedness as being *the original pre-disposition or the ability in a certain area and talent being the full development of that gift*. However, she is uncertain whether staff views it like that, particularly new staff members who were not a part of the whole process (GATE Coordinator Interview, 29.04.15). The GATE Committee are said to have a group definition that *giftedness is innate and the talent is acquired but whether staff have that in their own mind as a definition, I don't know ... it depends [on] who you talk to* (Assistant Rector Senior School Interview, 25.02.15).

Four staff questionnaire respondents (57.1%) indicated that the school has a school-wide definition, with only one respondent articulating it as follows: *gifted students are those who have above average ability. They may have an innate ability in a certain area but it may not have been developed into a talent*. The remaining three respondents indicated 'to some extent' (n=2) and 'not sure' (n=1). Two staff respondents (28.6%) indicated that the school uses a curriculum model to guide identification and provisions 'to some extent' with the "Enrichment Triad Model" specified by one respondent; and the remaining five respondents (71.4%) were 'unsure'.

Parent perspectives on the definition

When asked what 'gifted and talented' means at this school, 56.52% (n=13) parent responses included: (a) above average performance or ability (e.g., very capable, excels above the expected, gets high marks, warrants extension); (b) "academic" intelligence; (c) identified as outstanding or talented; (d) child showing willingness and/or behaviours appropriate to undertaking this further learning (e.g., good attitude); and (e) a programme that encourages a child to think outside the square. Ten respondents (43.47%) were 'unsure' (e.g., *I think they follow the standard MoE definition*) (Year 12 parent).

Student perspectives on the definition

All student respondents (n=17) provided a response to what 'gifted and talented' means at their school, with main themes including: (a) above average (e.g., in aptitude; abilities; *you are smart*); (b) only academic; (c) skilled and talented or strengths in several areas (e.g., *the school focuses on developing gift and talent in more than one*

area to create well rounded people); (d) having potential; (e) additional work and opportunities; and (f) to be a part of the gifted and talented group.

The following quotes from the Student Focus Groups captured the themes of discussion about definition:

You go out of class once a week and do extra work ... problem-solving (Year 10 students, 19.05.15).

To be gifted and talented at this school just means you're a 'tall poppy' ... a 'tall poppy' is someone who rises above the rest in terms of their ability or achievement in any given subject or area of school ... and the school recognises that (Year 13 students, 02.07.15).

MULTI-CATEGORICAL IDENTIFICATION

The school uses a multi-categorical form of identification with processes and terminology that are appropriate to each of the six areas of giftedness (adapted from Riley et al., 2004). School policy espouses that in identifying gifted students, it is vitally important to include those who may be *potentially* gifted but not yet achieving. Identification is a 'fluid' process or revolving door type of approach whereby students can be identified at any point in the year (GATE Coordinator Interview, 29.04.15) through identification procedures that are flexible, ongoing, inclusive of all groups and drawn from a wide range of sources to ensure that all relevant information is considered: "the sole reason for identifying students as being gifted and talented is to ensure that their specific educational needs are being addressed so that they can reach their full potential".

It's kind of a pretty open all round anybody [staff, parents, students] can make a suggestion ... there's always the flexibility to pull kids into that programme if they're the right ones (Rector Interview, 30.03.15).

The identification process applies to all students and at all times ... there's no bias at all (Assistant Rector Senior School Interview, 25.02.15).

It was acknowledged that in order to do this, it may be necessary to look beyond standardised tests or methods of appraisal (Policy, 2007). In 2012, the GATE Coordinator also started attending the Year 9 teacher meetings (top two classes) as an additional avenue of gathering information (Review, 2012).

Identification form for teachers

The identification form is distributed by the GATE Coordinator typically at a staff meeting (in Term 1 or 2) and staff are asked to nominate students and their area of giftedness (e.g., cultural, sporting) from all year levels of the school (Identification Form, 2011). The GATE Coordinator also has discussions with specific teachers to further inform the identification process (GATE Coordinator Interview, 29.04.15).

On this form, the school defines gifted and talented students as those who have the potential to achieve outstanding performance (usually in the top 10%) among their age-group peers. Characteristics that are often identifiable in gifted students that may apply to any aspect of their performance are also outlined to guide referring teachers. The characteristics include: flexible and imaginative; highly motivated; inquisitive; sense of humour; strong feelings and opinions; fast learner; intuitive and critical thinker; and advanced reader. The form also states that students who are gifted may not necessarily be achieving at a high level and may be difficult to identify (Identification Form, 2013).

An *'Identification of Gifted and Talented Sportsmen'* form with specific criteria for identification in the 'sporting' area was also devised in particular for the Director of Sport.

He [the Director of Sport] has a whole lot of information that I don't have about which boys are in sporting academies ... out of school provisions ... so you don't really get to hear about it (GATE Coordinator Interview, 29.04.15).

Consultation with the school's Māori teacher, alongside consideration of concepts identified by New Zealand researcher, Bevan-Brown (2009), led to a list of identifiers for the conceptualisation of Māori giftedness at this school termed under the area of *'Cultural Empathy'* which includes: *manaakitanga* (caring, shows support to others); *mātauranga* (intellect, thinking skills); *toi whakari* (physical and artistic performance); and *wairuatanga* (balance, calm, being grounded).

We are aware of cultural differences ... and are sensitive to them ... we try to include aspects of their [the students'] culture and recognise their particular gifts (GATE Coordinator Interview, 29.04.15).

Register of gifted and talented students

A register was first established in 2008 to track and monitor the students identified throughout the school. Review documentation acknowledges that “the identification process and the maintenance of a gifted and talented register is an ongoing and dynamic process” (Review, 2008). In the first year of implementation, although formal assessment methods were reported (in 2008) to have been used extensively to draw up the register, as the year progressed, teacher observation, parent nomination and self-nomination became more useful (Review, 2008). “It is important that our identification processes look at a variety of sources to ensure that underachieving gifted students continue to be identified” (Review, 2009).

Areas of giftedness in identification

‘*Academic*’ was identified as the major focus of identification at this school by 100% (n=7) staff respondents followed by ‘*Visual/Performing Arts*’ (71.4%, n=5); ‘*Sporting*’ (71.4%, n=5); ‘*Creativity*’ (57.1%, n=4); ‘*Cultural Empathy*’ (57.1%, n=4); and ‘*Leadership*’ (28.6%, n=2). All seven staff respondents also indicated that they had identified students in the ‘*Academic*’ area in the last 12 months.

Since the commencement of formal identification in 2008, the number of students on the register has ranged from 165 (2008) to 218 (2015), 33.26% and 43.95% respectively of the school roll (n=496). The area most identified every year is ‘*Academic*’, ranging from 61 (in 2014) to 85 students (2011); followed by ‘*Visual/Performing Arts*’, ranging from 26 (2009) to 46 students (2015). ‘*Cultural Empathy*’ is the least identified area annually, ranging from 7 (2008) to 15 students (2015) (see Table 3).

Table 3. *Summary of Registers of Gifted and Talented Students (2008 – 2015).*

YEAR	Academic	Creativity	Cultural Empathy	Sporting	Leadership	Visual/Performing Arts	TOTAL
2008	73	10	7	27	20	28	165
2009	77	9	7	35	23	26	177
2010	72	12	10	34	16	30	174
2011	85	11	12	26	27	38	199
2012	82	17	10	21	26	41	197
2013	74	19	10	28	21	38	190
2014	61	21	12	31	22	40	187
2015	71	26	15	39	21	46	218
GRAND TOTAL	595	125	83	241	176	287	1507

Teacher identification - Professional judgement, observation, and experience

Teacher identification is largely viewed as the primary source of identification as well as the most effective by staff participants (Assistant Rector Junior School Interview, 11.03.15; GATE Coordinator Interview, 29.04.14; Rector Interview, 30.03.15; Staff Focus Group Interview, 21.08.15). This can be in the form of professional judgement and experience, or through observation or knowledge of the students, and feeding this information back through the identification form and/or directly to the GATE Coordinator.

Staff responses that encapsulated this perspective included:

The most effective is the teacher identification ... we rely heavily on that and I do think it's a very good way of identifying ... and that is why we do it in the middle of the year because they've had a chance to get to know the kids (GATE Coordinator Interview, 29.04.15).

Teacher judgement I believe is huge ... Whilst it's subjective, it's often very accurate ... Teachers pick up on those little things, the quirky things that say hang on let's have a look at this further ... And sometimes the stats don't always back it up ... and if we went on stats alone, we would miss a lot of kids out (Assistant Rector Junior School Interview, 11.03.15).

Just from us being around and observing kids and having knowledge of what level that age group should be at and seeing a kid that's performing at a higher level (HOD Science, 21.08.15).

It comes from experience and your teacher judgement ... the more experienced you are, potentially you should have a better idea of the levels of your students (Intermediate School Teacher, 21.08.15).

Staff Focus Group participants were only largely aware of one practice in place for identification (via the Identification Form). There was also a degree of uncertainty communicated as to what happens to the register (e.g., where it is located, when, duration students remain on the register).

We don't get to say that they are 'gifted', we just recommend them [boys] and their area ... but then there's not a lot of what happens next (Intermediate School Teacher, 21.08.15).

Parent Identification

School documentation states that parents are an essential part of the identification process, and parents are invited (e.g., via School Newsletters) to contact the school if they feel that their son is gifted in an area that has not been identified (Rector's Newsletter, July/August 2015). According to the GATE Coordinator (29.04.15), the school does not get a lot of parent identification as many parents are diffident about identifying their son as gifted and sometimes *it comes in a circuitous kind of way*. Nonetheless, parent identification has occurred in the past and this is noted in the registers (2008; 2010; 2014). Parents in the past have also supplied the school with reports carried out by external evaluation (e.g., son tested at the 98th percentile). There is also an opportunity for parents during entrance interviews (e.g., at Year 7 or 9) to provide more information about their sons (e.g., interests, strengths) (Assistant Rector Senior School Interview, 25.02.15).

Peer identification and self-nomination

Peer identification was first considered in 2010 when a Year 9 boy approached the GATE Coordinator to consider one of his peers whom he thought should have been selected for the Year 9 withdrawal group:

I didn't initially make the Year 9 group and they took [student's name] student recommendation to get me in (the aforementioned Year 9, now Year 13 student).

The school now includes peer identification but in a less formal way (e.g., via discussion in the withdrawal programmes).

It [peer identification] is more likely to come from a group who have a similar outlook or who have a similar kind of take on things ... boys who they spark off in class (GATE Coordinator Interview, 29.04.15).

A question about peer identification is also on the initial student profiles completed at the start of the withdrawal programme (Review, 2011). There is also evidence of self-nomination and subsequent inclusion in the Year 10 withdrawal group (Meeting Minutes, 27.11.08).

Student data/results

Progressive Achievement Test (PAT) results, Middle Years Information System (MidYIS) data (e.g., vocabulary; maths; non-verbal; skills; and overall performance scores), entrance and placement examination results (for class streaming), and previous school/external reports are also considered by the GATE Committee as part of the identification process. Year 9 MidYIS testing is said to provide interesting data which has led to inclusion on the ‘*Academic*’ register (Review, 2009).

It’s good baseline data [in English, Maths and Reasoning], it’s valid ... when you marry the PATs and the MidYIS assessment you get a pretty good picture of where the kids are at ... the gist of it comes out where a student is struggling or where a student has excelled or is not performing but is capable (Assistant Rector Senior School Interview, 25.02.15).

This data is also utilised by the GATE Committee to ascertain which students would best suit the withdrawal programmes (Assistant Rector Junior School Interview, 11.03.15).

Staff perspectives on identification

Six staff respondents (85.7%) reported that this school has formally identified students in the last 12 months, and one respondent was ‘*unsure*’. The number of students thought to be identified annually ranged from 8-30. Six respondents (85.7%) were familiar with the identification process used at this school, and one respondent was ‘*unsure*’. When asked to select a statement (out of a supplied list of six statements) that best describes staff perception of the identification processes: “the process is fair, inclusive and appropriate and targets a reasonable number of students for participation in the programme(s)” was considered the most relevant by four respondents (57.1%). On a five-point rating scale regarding how well the school is identifying students (1 = poorly through to 5 = very well), respondents either indicated a rating of ‘3’ (28.6%, n=2); ‘4’ (42.9%, n=3); or ‘5’ (28.6%, n=2). Supporting comments included: (a) endorsements/praise for the GATE Coordinator (e.g., *[The GATE Coordinator] is extremely well qualified both academically and in life experience ... she puts a considerable amount of time into this vehicle*); and (b) reported barriers e.g., *not everyone gets on board to help identify and assist with the Gifted and Talented Programme ... not perfect because some boys with little motivation fly beneath the*

radar ... relies on many ears and eyes to discover those who could benefit ... identification is much harder and less accurate with under-achieving students who may be gifted.

Student perspectives on identification

Student participants had some idea about how they were identified with the older boys demonstrating greater knowledge and understanding of the identification process. There was general consensus among Year 13 participants that they were identified for the 'G & T group' (withdrawal programme) by their Year 9 PAT test results and teacher recommendations. In terms of how they were informed about this identification, *the parents got sent a letter ... they just came to us in class one day ... I remember getting taken out of class every Thursday* typified the student responses (Year 13 students, 02.07.15).

A degree of uncertainty was reflected about identification in the Year 10 Focus Group:

We never actually found out how we got selected for it [the Year 9 withdrawal programme] but I think that we were nominated by one of our teachers or more.

I think 'A' stream boys and how well we did in class afterwards.

I think we were probably identified in the same sort of a process to how we're streamed in terms of 'A' stream, 'B' stream ... so this is if anything just an extra stream (Year 10 students, 19.05.15).

However, it was evident that the majority of the Year 10 participants would like to know how they were identified but had never thought to ask.

With the identification, maybe if you got told like how they selected you for this [the withdrawal programme] ... knowing why and how ... knowing why you're picked could make you work on that more if you know why you are working for it (Year 10 students, 19.05.15).

Student Questionnaire responses indicated that 47.05% (n=8) were 'unsure' how they were identified with three of these respondents reporting that they were not identified. Five respondents (29.41%) reported that they were identified either by test results (e.g., PAT, mid-year examinations), achievements (e.g., in Intermediate School), or performance (e.g., in the top class; good at writing). One respondent reported that he was identified through peer nomination. When asked what area of ability they were identified in, 87.5% (n=14) indicated that they were identified in the 'Academic' area.

When asked how they thought students should be identified, respondents suggested: some form of testing or academic results (52.94%, n=9) was the most common response; followed by Teacher/Staff/Peer identification (23.52%, n=4). Identifying students who have talents in other areas or placing more emphasis on areas outside of academia; Habits of Mind; attitude; and leadership were also suggested.

Parent perspectives on identification

Only three parent respondents (13%) knew how their son was identified with supporting comments including: *did well in entrance examination, teachers observing his ability to think differently, his ability to learn* (Year 10 parent); *by a Psychologist who confirmed he was in the 98th percentile* (Year 12 parent); and by researcher informing her that her son (Year 12) was identified in the sporting register. Parent suppositions about how their sons were identified from remaining respondents included: school or classroom tests (e.g., PAT, MidYIS); in the ‘A’ stream; teachers reports, observation or input; school placement examinations. Eleven parent respondents (47.82%) indicated that their son was identified in the ‘Academic’ area.

Barriers to Identification

Common themes regarding barriers to identification that emerged from staff participants include the following:

1. Teacher buy-in to the identification process and gifted and talented education. GATE Committee Meeting Minutes on seven separate occasions (from 2008 to 2014) indicated that the staff response to completing the identification forms has historically been limited or poor.

Although they're keen to get involved with different provisions, because it impacts on their class time ... and they are so busy, I have to nag them to do the identification (GATE Coordinator Interview, 29.04.15).

The GATE Coordinator has overcome this somewhat by speaking at staff meetings and with teachers whose input was necessary (e.g., ‘A’ Stream, Arts, and Māori teachers; and the Sports Director) as part of the identification process (Meeting Minutes, 07.06.13).

2. Time of identification (in Term 1) poses limitations in identification for certain subject areas (particularly within the Arts) and Option subjects (e.g., in Year 9) as *two thirds to three quarters of them we haven't seen yet so they just sort of don't get judged in any of the Art type areas* (HoD Music, 21.08.15).

3. Lack of knowledge and understanding about what is gifted and clarity about the specific criteria for gifted and talented in different areas.

How do we identify students if we really don't understand what we are trying to achieve with it (Assistant Rector Junior School Interview, 11.03.15).

I'm sure a lot of teachers/staff probably don't know what gifted is ... they may be very bright, good at sport but does that mean he's gifted? (Intermediate School Teacher, 21.08.15).

4. Difficulties in identifying twice exceptional or underachieving students.

It's also the kids who are twice exceptional ... they are say dyslexic but very good at English ... there's a learning issue there they need support with but they are also gifted or talented in other areas so that makes it quite difficult to identify them (HoD Languages, 21.08.15).

We have got lots of underachievers ... they're harder to identify (GATE Coordinator Interview, 29.04.15).

5. Students not identified in the identification process, for example, new students to the school (Meeting Minutes, 01.08.12; 07.06.13).

That's happened occasionally where the 'B' Stream boy would fly through the pack and you suddenly realise by the time he got to Year 11, he was producing results that could give him the jump to Year 13 (Assistant Rector Senior School Interview, 25.02.15).

We've got a process that if you don't have teacher judgment and it's not showing through the data ... high MidYIS, high PATs ... if you don't fall into one of those categories, you may miss out (Assistant Rector Junior School Interview, 11.03.15).

Quite a few 'B' Streamers do work hard and want to make it into 'A' Stream and that's what they've been trying to do, except when there's not any movement, it's like they kind of stop trying ... I think they should really go through the terms for why they should be going up or going down [the Streams] and the Gifted and Talented Programme because if there's other people that aren't necessarily in 'A' Stream that's kind of unfair on them that they don't get this opportunity (Year 10 students, 19.05.15).

PROVISIONS

A wide range of provisions and approaches are utilised to maximise the opportunities and educational experiences for gifted and talented students at this school (Brochure for Parents; Policy, 2007; 2008; 2012).

If I don't identify them for the withdrawal group, it's not like that's it ... there are other things that will pick up and feed into it ... I think that's our greatest strength is that we have many, many different provisions ... we try everything (GATE Coordinator Interview, 29.04.15).

Acceleration

I think acceleration is the most effective method of providing for our gifted and talented students (GATE Coordinator Interview, 29.04.15).

Historically, the top Year 10 class at this school were doing a full course of five subjects in School Certificate (English, Maths, Science, Economics, and Geography). Due largely to poor results in certain subject areas and teacher/student feedback (e.g., work load), the accelerate pathway was refined accordingly.

The success of it [the accelerate student pathway] was that we responded to what the kids were saying they needed (Assistant Rector Senior School Interview, 25.02.15).

The accelerate student pathway essentially begins with ability streaming at Year 9 based on entrance examinations, PAT results, Assistant Rector interview, and review of other relevant school records. In Year 10, the 'A' Stream boys (the top class) undertake three National Certificate of Educational Achievement (NCEA) Level 1 subjects (Maths, Economics and Science). From Year 11 to 13, those on this pathway are offered a number of acceleration opportunities including: early invitation to full or partial study at NCEA Level 2 or 3 level if certain criteria are met in their Year 11 results; Cambridge Mathematics in Year 12; and extramural university level papers (see Appendix P for additional information about the accelerate student pathway).

Our acceleration policy gives students great opportunities, keeps them motivated and allows them wider choices when they get to Year 13 (Staff Questionnaire respondent).

Enrichment and extension programmes

Aside from differentiation in the classroom and extension opportunities in various subjects (e.g., Art, Music), enrichment experiences which fall outside the normal curriculum are also provided to cater for special interests and strengths (e.g., withdrawal programmes, Science badges, leadership conferences, the Auckland University Science Summer School and sports development programmes) (Brochure for Parents).

Withdrawal programmes (Years 9 and 10)

The withdrawal programme for Years 9 and 10 run by the GATE Coordinator commenced in 2008. At that time, it was decided to call the withdrawal sessions “extension classes” to mitigate any potential issues that may be associated with this for the boys (Meeting Minutes, 28.01.08). The programmes operate on a rotational timetable to minimise the impact on other teachers whereby students come out of their usual classes for one period a week (typically in Terms 3 and 4). The scheme and objectives for these programmes are based upon the broad principles of the New Zealand curriculum document and aims to produce students who are lifelong learners. It also incorporates and seeks to develop the five key competencies: thinking; using language, symbols and texts; managing self; relating to others; and participating and contributing (Gifted and Talented Programme: Year 9 & 10 Scheme of Work, 2013; Learning Media, 2007).

In 2009, the programme made a significant shift to incorporate *Renzulli’s School-wide Enrichment Model* based on student feedback received in 2008 coupled with research gleaned from the GATE Coordinator’s professional development to provide a more structured, cohesive approach to the programme (Review, 2009). The basic principles of this model espoused in the programme are:

1. The provision of enrichment activities, outside or beyond the normal curriculum, which will stimulate and interest gifted students.
2. The acquisition of skills which will support the independent learning of students.
3. The development of independent research projects based on the interests and needs of students.

Students complete Profiles at the start of the programme to provide information about their interests and strengths which informs programme planning.

I've noticed that right throughout the programme ... they'll show little hints of the things that we like and they've given them to us ... she's [GATE Coordinator] making sure that we stick to what we're good at or what we want to do ... playing to our strengths (Year 10 students, 19.05.15).

A variety of topics based on developing problem solving skills, and critical and innovative thinking are covered in the programme including theories of giftedness and talent; Gardner's multiple intelligences; book reviews; creativity exercises; internet skills exercises; and sceptics or deniers (at Year 9); and 'Dragon's Den' presentations; body language; introductions to Psychology and Philosophy; and guest speakers (in Year 10).

It's kind of like a class out of class where we get to have fun but at the same time learn and better ourselves in ways that we normally wouldn't at school ... it's a bit of a break from all the uniform stuff at school (Year 10 Student Focus Group Interview, 19.05.15).

'Futureintech' (graduates in the area of Science and Technology) workshops were considered the most successful outside provision by the GATE Coordinator (29.04.15). However, this entity no longer exists. Activities included demonstrations (e.g., blowing up things); developing a product (e.g., dog food for the Japanese market); how to cope with real-life problems (e.g., electrical supply problem); and mechatronics (e.g., robot workshop).

They [the students] really enjoyed that ... and were always engaged (GATE Coordinator Interview, 29.04.15).

Various guest speakers in special interest areas (e.g., stock broker, hypnotist) are also invited to provide experience in fields that students might not ordinarily encounter in the standard curriculum (GATE Coordinator Interview, 29.04.15). "The most important principle behind the extension programme is that it should be kept dynamic and responsive to current interests ... but it must also change in response to current research and practice and must be sustained by constant professional development" (Review, 2008; 2009).

Observations carried out in the Year 10 withdrawal programme provided a first-hand look at the 'Dragon's Den' initiative (introduced in 2012 to encourage creativity

and to develop presentation skills) from the conceptualisation phase through to final presentation in the board room to a panel of three ‘dragons’ (judges). These sessions were facilitated by the GATE Coordinator through regular thought-provoking discussions and constructive feedback on the set task. The students were actively engaged in the problem-solving process and development of innovative ideas for their product design, and confidently presented their final products for judging (Observations, 28.04.14; 23.06.15).

Tertiary papers and the Year 13 philosophy group

Year 13 students who have followed an accelerate pathway and may have completed some or all of their studies in Year 12 have the opportunity to enrol in tertiary papers (e.g., Accounting, Calculus and Economics from Canterbury, Waikato and Massey Universities). In 2012, a 100 level Philosophy paper from Waikato University which involves the study of key concepts in areas of applied ethics including abortion, euthanasia, health care, children's rights, pornography, justice, environmental issues, and religion was also added. Year 13 students also have an opportunity to develop their subjects at Scholarship level and/or to broaden their course of study (GATE Coordinator Interview, 29.04.15; Rector’s Newsletter, July/August 2015).

It was evident in the Year 13 Philosophy Group observation that the GATE Coordinator encourages the students to read and engage with contemporary articles on a range of topics and facilitates discussions that enable the students to respond with their own reasoned and supported arguments as well as develop their skills in lateral thinking and essay writing (Observation, 25.05.15).

Mentoring

Mentors can be set up for students on a case by case basis to provide guidance, role-modelling and empathetic support.

Some of them [mentors] are formally set up ... some of them are just adhoc ones that develop ... a lot of the teacher ones just develop ... if we can see that there’s a particular need for something that a staff member can’t really provide, then we’ll try to look for an outside mentor (GATE Coordinator Interview, 29.04.15).

Mentorships have occurred in Rugby (e.g., with the Rugby Union), Athletics, Design, Māori, and Music Composition (e.g., workshops with nationally renowned composers including David Hamilton and Jack Body).

Competitions

A wide variety of competitions for boys' to pit their skills against similarly talented students and cater to their competitive instincts are supported and encouraged by staff. Competitions that the students have participated in include: Australasian examinations; Mathletics; Science Fair; University of New South Wales academic examinations; the School Literature Quiz; impromptu or prepared speech competitions (e.g., Ngā Manu Kōrero National Secondary Speech Contest); the New Zealand Concert Band Festival; Rock Quest; Auckland Philharmonia Young Composers Competition; and various Sporting competitions and tournaments (Brochure for Parents; School Newsletter, 2009; 2010; 2011).

Scholarships

Scholarships are available annually including Academic, Sporting, Cultural and Te Whāiti. The Te Whāiti Noi Ā Toi Scheme Scholarship adds a significant element to the identification of and provisions for Māori students across all year levels at this school: *it gives gifted Māori students an opportunity to jump to the fore and to excel* (Assistant Rector Senior School Interview, 25.02.15). Approximately 25 Māori students receive this Scholarship annually (based on 2015 data).

Staff perspective on provisions

I don't think that many parents could espouse, would espouse, that this school has a Gifted and Talented Programme as such ... I would think that's the way we would like it to be, the fact that they know that there is provision and opportunity [in each of the areas] for their kids to excel is much better. It's irrelevant what you call it (Assistant Rector Senior School Interview, 25.02.15).

'To have opportunities to explore and develop their areas of high ability'; 'to experience high levels of challenge'; and 'to have ongoing opportunities for critical, creative and caring (ethical) thinking' were considered of highest need by staff questionnaire respondents (n=7) for gifted and talented students (see Figure 1.). Additional needs (outside of the eleven supplied statements) reported included: (a)

social skills development and cautiousness around acceleration; (b) more time allocated; and (c) more opportunities, not necessarily academic.

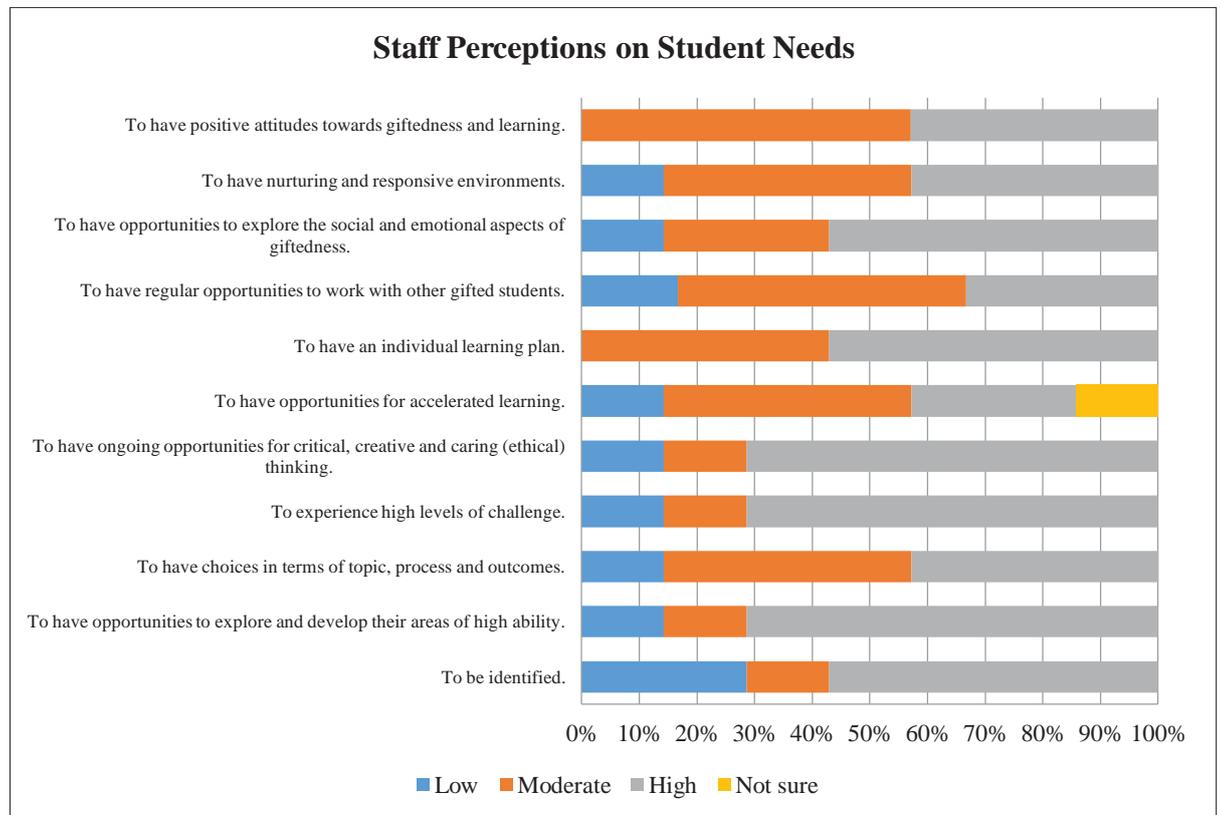


Figure 1. Summary of staff perceptions on student needs.

Two staff respondents (28.6%) indicated that they are directly involved in provisions (one of whom is the GATE Coordinator) whilst two respondents (28.6%) indicated ‘to some extent’ (e.g., identifying them, encouraging them and keeping an interest in their endeavours; and some modified assessment to extend students), and the remaining three respondents (42.9%) indicated ‘no’.

Ability grouping was the most identified classroom-based provision by staff questionnaire respondents (n=6) followed by independent study (n=4). Five staff respondents (71.4%) indicated school-based programmes have been provided with examples including: Gifted and Talented Group at Year 9 and 10; withdrawal groups; acceleration; and differentiation. Of the remaining two respondents, one indicated ‘no’ and one was ‘not sure’ about school-based programmes. Four respondents (57.1%) reported that this school uses external provisions (out of school providers) including Correspondence School; University level study, school clusters/networks, online

programmes, and competitions. Of the remaining staff respondents, one indicated 'no' and two were 'not sure' about external provisions.

When asked to rate how effective this school's provision is for gifted and talented students on a five-point rating scale (1 = *poorly* through to 5 = *very effective*), staff respondents either indicated a rating of '3' (14.3%, n=1); '4' (71.4%, n=5); or '5' (14.3%, n=1). Supporting comments for the given ratings included: (a) *the Gifted and Talented Group is isolated and nurtured but time restrictions for the boys determine the effectiveness*; (b) *praise for the GATE Coordinator*; (c) *the school enjoys success nationally in both academic and extra-curricular areas*.

In the Staff Focus Group (21.08.15), when asked about provisions, staff identified the [*GATE Coordinator's*] programme and the *Philosophy Paper in Year 13*. However, there was limited knowledge and uncertainty expressed about what the programme entails (e.g., how the programme runs from Year 9 into 10 and beyond); and whether these students remain on the register year after year. The limited knowledge about the programme was also thought (by the staff focus group participants) to be prevalent staff-wide and therefore presenting as a barrier in terms of being able to contribute effectively and provide for these students as a staff member.

Student perspectives on provision

The following student quotes encapsulated how gifted and talented students are catered for at this school:

The school does emphasise academics but it doesn't mean they don't want you to excel at other things. If you're really good at playing an instrument or sport, they will push you ... If you work hard the school gives you opportunities to excel ... it's more based on being well rounded and giving everything a go (Year 13 students, 02.07.15).

We get the GATE programme and outside of that you get recognised for your achievements ... you can get awards and stuff ... there are scholarships if you're good at something ... also if you are in the higher 'A' stream or in 'B' stream and you're really good at one subject, you can do NCEA a year early (Year 10 students, 19.05.15).

Parent perspectives on provision

Only one parent respondent (4.3%) knew how the needs of gifted and talented students are met at this school. Fourteen parent respondents (60.9%) indicated ‘no’ (they did not know). Eight respondents (34.8%) indicated ‘to some extent’ with provisions supplied including: GATE weekly programme; acceleration (e.g., via multi-level study); streaming; extension classes; enrichment opportunities; sports coaching in some areas; music tuition; and small classes. In terms of how their son’s needs are met at this school, responses included: (a) acceleration/early entry (e.g., in some NCEA subjects, Scholarship courses); (b) extension opportunities (e.g., tuition for Chamber Music group funded by the [Secondary Tertiary Alignment Resource] STAR programme); (c) opportunities to represent the school; (d) allowed to switch a regular school sport to pursue own sport of interest (e.g., competitive National fly fishing competitions); (e) G & T withdrawal programme; (f) being in the ‘A’ stream where academic excellence is expected; (g) teachers know and encourage students’ abilities; and (h) Te Kura Correspondence School (e.g., Mandarin Chinese). Six parent respondents (26.1%) indicated that their son has received additional enrichment outside of the school’s gifted and talented programme including: Chemistry Olympiad; regional or National competitions (e.g., Chamber Music competition); member of National Talent Squad for Triathlon NZ; private lessons (e.g., art, music, speech and drama); and the Duke of Edinburgh Hillary Award.

Barriers to provisions

Themes that emerged through participant responses regarding barriers to provision included timetabling; students missing classes to attend the withdrawal programme; lack of staff knowledge and understanding or specialist knowledge; lack of time; no continuity of the withdrawal programme post- Year 10; and no Scholarship programme as captured in the quotes below:

There’s always a problem with timetabling ... teachers have all been fantastic and supportive but it just means that instead of having a regular slot where I can have them [Year 13 Philosophy Group] once a week ... I have to juggle the whole time and I can’t hit the same slot every week and it’s the same with the withdrawal group ... you couldn’t do that if you had a teacher with a timetable commitment (GATE Coordinator Interview, 29.04.15).

There is a bit of a negative vibe to losing kids from the classroom ... You just make sure the kids catch up but they can cope (Assistant Rector Senior School Interview, 25.02.15).

I don't even know how the programme runs from Year 9 into 10, into 11, in 12, into 13 (HoD Languages, 21.08.15) ... or do they just jump in and jump out? (Intermediate School Teacher, 21.08.15).

Even if we've identified boys within our class who are gifted or talented ... but they are all gifted and talented in different areas ... then how do we go about differentiating our classroom work or our programmes in order to meet their needs when we're 'time poor' (HoD Languages, 21.08.15).

The main problem is that we're all so busy all the time ... finding time to meet with these boys to get them on the right path, to excel them (Intermediate School Teacher, 21.08.15).

To make the G & T thing more effective, they have to carry G & T into Year 11, 12 and 13 (Year 13 student, 02.07.15).

We have access to University papers but ... the school doesn't have a scholarship programme. The only things that exist are just teachers doing it themselves. It's not in their contract. They don't actually get paid for it. They just do it because they want kids to do alright (Year 13 student, 02.07.15).

FOUR CORNERSTONES PHILOSOPHY

Four cornerstone philosophy

The school's mission is "a balanced education for boys in a Christian setting emphasising excellence". The balance is reflected in the four special character 'cornerstones' of the School: *Academic Excellence; Sporting Endeavour; Cultural Participation; and Christian Dimension* (School Prospectus).

Academic excellence

The school has built up an enviable reputation in its sixty years of growth, for producing excellent academic results. In 2014, 94% of the school's candidates passed NCEA Level 1, 99% Level 2 and 97% Level 3, with 93% gaining University Entrance, placing this school at the top of all schools nationally. Students learn in an achievement based environment, with class sizes averaging between 15-22 students, where the expectations of academic success are high. Staff are said to work hard at creating a structured and caring atmosphere in which boys can attain their potential. "An

environment of high expectation and academic focus works well for boys especially when the teaching practices are based on the needs and interests of the boys and around the best international research on how boys learn” (Rector, School Prospectus). A Gifted and Talented Programme, learning support tutors and ESOL teachers, along with specialist staff, provide extra support to enable all boys to achieve their best (School Prospectus).

All the teachers encourage you to do your best, not just be average ... for some people it would be just passing with Achieve, whereas other people it would be some of the boys who finish Year 13 going through NCEA Level 2 or 3 with 100% Excellence ... in the 90-95 plus GPA (Year 10 Focus Group, 19.05.15).

Sporting endeavour

The school prides itself on its wide sports involvement by the boys and staff, which has led to successes at regional and national levels. The school has produced many outstanding sportsmen notably in Rugby Union. Staff are said to be committed to work with the boys to develop their sporting skills. “This makes for good relationships (inside and outside the classroom) and also allows chances to see students’ strengths which may not be as easily visible in the classroom situation” (School Prospectus).

Cultural participation

Students are strongly encouraged to become involved in the many cultural activities offered by the school. Approximately 50% of the students opt to learn a musical instrument provided by itinerant tutors. Music is said to be a big part of daily life with groups playing at assemblies or Chapel Services. Students can also join the School Brass, Jazz, Orchestra, Rock, Symphonic Band, Chamber Music groups and the Pipe Band who perform regularly at the school, in the community or in regional and national competitions. The school also purports an enviable reputation in drama, debating and public speaking (School Prospectus).

Christian dimension

The 'special character' section of the School’s Integration Deed Document (1998), states: "The school shall at all times in the future be conducted and operated so as to maintain and preserve its Special Character. It was founded under the auspices of the Presbyterian Church, and being interdenominational provides an education based

upon Christian beliefs and practices—a balanced education for boys in a Christian setting." The students are given opportunities to assume responsibility within this cornerstone, to serve others and to be aware of the spiritual, as well as the material nature of life (School Prospectus).

If we have boys who are particularly committed in a spiritual sense there are lots of opportunities for them to develop that and share their ideas with people ... we have leadership opportunities ... you can be Chapel Prefect ... there's lots of opportunities for boys to speak in the Chapel, to deliver sermons (GATE Coordinator Interview, 29.04.15).

Staff perspectives on the four cornerstones

The four cornerstones are *incorporated in spirit rather than in letter* (GATE Coordinator Interview, 29.04.15) or written in policies but are covered well and *without question the cornerstone philosophy is where it's been built on* (Assistant Rector Senior School Interview, 25.02.15) through the wide ranging aspects of giftedness evident in the identification process (Assistant Rector Junior School Interview, 11.03.15) and *in terms of identifying key areas, it [the Identification Form] covers it* (Assistant Rector Junior School Interview, 11.03.15). *[GATE Coordinator] is certainly identifying sport, cultural and academic giftedness and holistic in the sense that certainly sporting and cultural extension and accelerate opportunities are there* (Assistant Rector Senior School Interview, 25.02.15). *The Christian Dimension of caring and being aware of individual student need and relationship is integral to whether it is successful or not* (Rector Interview, 2015) and *probably in the content of what's done* (Assistant Rector Senior School Interview, 25.02.15). *I think we cover the four cornerstones well in both the identification and the provisions because we consider all of them* (GATE Coordinator Interview, 29.04.15).

It was evident that there was a level of uncertainty as to whether the four cornerstones are incorporated into programmes with staff focus group participant expressing:

I'm presuming it's [the four cornerstones] in the overarching philosophy of gifted and talented (Technology Teacher).

It's within the identification isn't it? ... we don't know if it's within the actual programme (HoD Music, 21.08.15).

Staff participants drew reference to three cornerstones (Academic, Sporting and Cultural), particularly within the identification process, however, it was challenging for participants to provide specific examples with reference to the Christian Dimension.

Two Staff Questionnaire respondents (28.6%) reported that this school's identification methods place equal emphasis on all four cornerstones with respective comments including: *All four cornerstones are important for all students*. Four respondents (57.1%) indicated 'to some extent': *more emphasis is placed on the academic excellence cornerstone but sporting endeavour is also very important. Very little focus is placed on giftedness in the Christian dimension;* and 14.3% (n=1) indicated 'no': *not a level playing field if Senior Management [are] involved*. Only one staff respondent reported that the school's provisions place equal emphasis on all four cornerstones.

Table 4. *Staff perspectives on how well the school identifies gifted and talented students in relation to the four cornerstones.*

Four Cornerstones	Rating				
	1	2	3	4	5
<i>Academic Excellence</i>	0	0	0	50%	50%
<i>Sporting Endeavour</i>	0	16.7%	0	50%	33.3%
<i>Cultural Participation</i>	0	16.7%	16.7%	33.3%	33.3%
<i>Christian Dimension</i>	16.7%	16.7%	33.3%	16.7%	16.7%

Note. Rating based on a 5 point rating scale (1 = *not identified at all* to 5 = *very well*).

Staff respondents indicated that the school identifies best in the 'Academic Excellence' cornerstone with 50% (n=3) giving a rating of '5'. The 'Christian Dimension' cornerstone yield a wider range of ratings from '1' (16.7%; n=1) through to '5' (16.7%; n=1) (see Table 4.).

Table 5. *Staff perspectives on how well the school provides for gifted and talented students in relation to the four cornerstones.*

Four Cornerstones	Rating				
	1	2	3	4	5
<i>Academic Excellence</i>	0	0	16.7%	33.3%	50%
<i>Sporting Endeavour</i>	0	16.7%	0	50%	33.3%
<i>Cultural Participation</i>	0	16.7%	16.7%	33.3%	33.3%
<i>Christian Dimension</i>	16.7%	33.3%	16.7%	16.7%	16.7%

Note. Rating based on a 5 point rating scale (1 = *not identified at all* to 5 = *very well*).

With reference to provisions and the cornerstones, all four cornerstones yielded the same (e.g., ‘Sporting Endeavour’ and ‘Cultural Participation’) or similar ratings given in relation to identification (see Table 5.).

Student perspectives on the four cornerstones

Year 13 Focus Group participants voiced that the school actively facilitates and drives the ‘Academic Excellence’ cornerstone significantly more than the other three. Furthermore, the students said there is a clear person at the top (Assistant Rector Senior School) leading the academics who students go to for all their academic needs. The Gifted and Talented Programme (with specific reference to the Year 9 and 10 withdrawal programme) is thought to be academic *but a different type of academic to normal ... while the programme recognised that other intelligences or other gifts existed in the other three cornerstones, we didn’t go into any depth developing or studying them.* With regards to the Sporting, Cultural, and Christian Dimension cornerstones, students expressed that it is more self-driven, your own choice (e.g., to take Private Speech lessons, learn an instrument), or has a compulsory element to it but there are opportunities available if students want to pursue it further.

Year 10 Focus Group participants reported that the school recognises all four cornerstones but Cultural Participation and Christian Dimension to a lesser extent.

There are awards for all of the cornerstones [e.g., Academic Ties, NCEA with Excellence Certificates, badges for breaking records in sports], but gifted and talented is mainly focused on the academic and advancing academic knowledge.

We're a big sporting school ... we are put into the higher team and they're trained better, get the best coaches ... there's already things to cater for sporting ... and this G & T programme is catering for academics, but I think there could be other programmes for cultural and religious sort of people who want to follow that up (Year 10 students, 19.05.15).

The boys also spoke of Sporting, Academic, Cultural (e.g., Music, Speech and Drama), and the Te Whāiti Scholarships, and leadership roles (e.g., Prefects for each cornerstone) as part of provisions.

Parent perspectives on identification and the four cornerstones

Four parent respondents (17.4%) indicated that equal emphasis is placed on all four cornerstones in identification:

From my experiences and observations, the school appears to do a good job in identifying gifted students (Year 12 parent).

This is our 9th successive year as school parents. During those years I have enjoyed seeing boys recognised for their musical talent, their speaking ability, prowess on the sports field, profession of faith, acting ability, academic achievement ... the list goes on (Year 12 parent).

I believe the school has an equal emphasis on the four cornerstones, however all the boys are individuals and their preferences do not mean they have equal emphasis on them (Year 9 parent).

Six parent respondents (26.1%) indicated 'no' with supporting comments related to: (a) imbalances (e.g., *it has been just on academic for the programme with a school emphasis on sporting abilities too*); (b) tokenism (e.g., *spiritual and cultural are pulled out for show*); (c) question of relevancy of the four cornerstones in identifying a gifted and/or talented boy; and (d) the subjective nature of identifying sporting talent.

Five parent respondents (21.7%) indicated 'to some extent':

I think the school really tries to place equal emphasis on each of the cornerstones, but the culture of the school is still heavily bent toward the 'first 15'/'first 11' mentality (Year 9 parent).

Academic and sporting is a high priority. I'm not sure if this flows onto cultural or spiritual dimensions (Year 12 parent).

Academic and sporting success definitely superior (Year 9 parent).

Most probably identified only via academic and sporting ability (Year 12 parent).

Eight parent respondents (34.8%) were 'unsure' due to: (a) lack of knowledge of the identification process to make valid comments (n=2); (b) uncertainty about how a gifted and talented programme could be applied to Cultural Participation and Christian Dimension; and (c) whether the Christian Dimension is promoted on par with the other three cornerstones.

Parent perspectives on provisions and the four cornerstones

Only one parent respondent (4.5%) thought that equal emphasis is placed on all four cornerstones for provisions:

The school appears to make an excellent effort to provide equal or balanced opportunities for all four cornerstones. There may not be equal proportions in each field but there is equal opportunity (Year 12 parent).

Two parent respondents (9.1%) indicated 'to some extent':

I do not feel there will ever, or should ever be, equal emphasis. The emphasis will shift over time as the particular talents of particular age groups emerge. There certainly appears to be a willingness to recognise all four cornerstones which is all that is required (Year 12 parent).

There are opportunities to belong to groups of interstate but then it is up to staff in how to deal with them and what to provide (Year 11 parent).

Fifteen parent respondents (68.2%) were 'unsure' with comments primarily related to lack of information about the programme or provisions available (e.g., son recently joined the programme).

EVALUATION

We don't individually evaluate all aspects of it [the Gifted and Talented Programme] on a formal basis ... we constantly adjust both our processes and provisions to meet the needs of the particular students we have (GATE Coordinator Interview, 29.04.15).

Annual report

The GATE Coordinator completes an Annual Report which is submitted mid-year to the GATE Committee to review the year. Areas of review in this Annual Report

included: Definition/Policy; Needs Analysis; Professional Development; Resources; Identification; Register; Programme (Year 9 and 10 withdrawal programmes); Monitoring; Music/Composition Workshops; Mentoring; Tertiary Papers; Education Review Office Visit; Communication; and Evaluation (Review, 2008-2013).

Recommendations are subsequently planned for and/or goals are set and implemented accordingly based on this evaluation process (e.g., what has been successful, what are the boys' needs and how to develop it).

Monitoring

According to school documentation, all boys on the register will be tracked and monitored throughout their school career in order to build up a profile of their strengths and interests to set individual goals (Brochure for Parents). The individual files are not only a good way of monitoring the students' progress but also to record any social or emotional problems that may arise (Review, 2008).

I have ongoing meetings with basically all of those fellows who are in that accelerate pathway and negotiating what goes on in those meetings with parents ... whether or not the boys' are being stimulated by the academic programme. I'm pretty aware of where every one of the boys are at (Assistant Rector Senior School Interview, 25.02.15).

Evaluation of withdrawal programmes (Year 9 and 10)

I think the best way of evaluating the provisions is the feedback from the boys, certainly for the withdrawal programme (GATE Coordinator Interview, 29.04.15).

Withdrawal programme students complete an end of year Evaluation Form which comprises of a mixture of likert-rating scales, and open-ended and closed questions to ascertain student attitudes and efficacy measures.

I like the variety of the programme ... we don't have any idea what we'll be doing next.

In G & T, they try to make you better your strengths because that's the way the world is going.

There's no grading system ... it's just doing the best we can, not being graded Merit, Achieve, Excellence (Year 10 students, 19.05.15).

[Gate Coordinator] who is the driving force behind the G & T programme ... she's excellent. There's a real passion there ... she's really good with the boys (Year 13 students, 02.07.15).

Analysis of survey responses (2008, 2010, 2011) has not only provided further information about students' perceptions, motivation, and attitudes towards their education but also guided programming decisions (e.g., which aspects of the programme had been most effective).

Evaluation of Year 13 philosophy group

Aside from final results for the philosophy paper (e.g., ranging from B+ to A+ in 2015), evaluation is based largely on student feedback. Furthermore, the growth in class size from two to six students (since 2012) indicates, whilst not a formal evaluation that:

we are on the right track with this ... boys are wanting to do it ... they're getting something out of it ... it's providing a useful thing for them in personal development but also aspects like scholarship applications (GATE Coordinator Interview, 29.04.15).

I think that it [the Philosophy Paper] was one of the little things that differentiated me as a [scholarship] candidate, not just in terms of what it said about me on paper, but in the way I conduct myself and its effect on my life in general (Year 13 student, 2014 cited in the Rector's Newsletter, July/August 2015).

Evaluation of Acceleration

There's no actual process for evaluating the acceleration. It's more of a cumulative impression ... happens on a kind of adhoc basis (GATE Coordinator Interview, 29.04.15).

The GATE Coordinator and Assistant Rector Senior School discuss individual student progress, performance and results, and decisions are made accordingly. The school also receives feedback from parents, typically during the subject selection process.

We get quite a lot of feedback from the parents, evaluation from the parents, saying whether that [acceleration] worked well for their boys ... we are very receptive to that kind of thing (GATE Coordinator Interview, 29.04.15).

At this time, the Assistant Rector Senior School also meets with all senior students to discuss their subject selection and *that's when the acceleration discussions take place* (GATE Coordinator Interview, 29.04.15).

Student feedback regarding acceleration

Six student questionnaire respondents (35.29%) indicated benefits from acceleration with reasons including: (a) early completion allows for a head start and additional choices; and (b) easier transition to University.

As Head Prefect this year, being able to complete my Year 13 course last year was hugely beneficial to me. The acceleration programme allowed me to invest more time and energy into my other pursuits in my last year of schooling (Head Prefect, 2015).

Ten student respondents (58.82%) indicated they were accelerated in the right subjects (and right number) with reasons supplied including: (a) subjects are directly related to intended degree/career path; (b) NCEA subjects offered at Year 10 are subjects most students would take anyway; (c) enjoyment from working at a higher level; and (d) subjects are pitched at the right level.

Eight student respondents (47.05%) indicated that they would have chosen themselves to be accelerated with reasons given including:

I like to be challenged mentally and physically (Year 9 student).

It's just kind of one of the values you get when you go into 'A' stream ... you kind of realise that you want to be doing higher stuff and that you don't really want to muck around (Year 10 student, 19.05.15).

This provides other opportunities later on (Year 13 student).

Parent feedback regarding acceleration

Nine parent questionnaire respondents (40.90%) indicated benefits from acceleration as it: (a) provided confidence going into Year 11/improved educational experience (e.g., having already achieved some NCEA Level 1 credits in Year 10); (b) three NCEA Level 1 in Year 10; (c) prevents boredom; (d) increases awareness about importance of results (e.g., for University placement); and (e) more opportunities/options completing NCEA earlier.

Skipping Level 2 NCEA in two subjects means he can try more subject courses in Level 3 NCEA next year and in Year 13 undertake external University papers extramurally (Year 12 parent).

This year he is doing Scholarship papers and next year will start his accounting degree at Massey [University] by doing two papers extramurally (Year 12 parent).

Twelve parent respondents (54.54%) indicated they would support acceleration for their son again knowing what they know now as it: (a) sustains interest; (b) provides challenge; and (c) benefits development having friends accelerated as well. Three respondents (14.28%) expressed reservations regarding: (a) more Year 10 parental involvement required; (b) extra workload/pressure issues in Years 9 and 10 (e.g., *pressure to cover two years of work in preparation to do NCEA next year*); and (c) not achieving the best grade when accelerated a year ahead.

Student results/assessment data

MidYIS assessment data at Year 11 is a key evaluation point to look at value-added for these students (Assistant Rector Senior School Interview, 25.02.15). Value-added measures whether a student, subject or group kept pace, lagged behind or performed better than expected since their Year 9 MidYIS assessment. Discussions occur (e.g., at Senior Management level) about the presenting data (e.g., any trends that may be effecting student performance) and programme accommodations are made accordingly. An example given was when the school made the decision to reduce the historic five School Certificate subjects to its present three NCEA Level 1 subjects for Year 10 ‘A’ stream, as the MidYIS data was reflecting that *the loading was too great on the kids ... those kids were being pushed too far*. Coinciding with this decision, it was reported that the students at the top end have shown better value-added at Year 11 over the past few years (Assistant Rector Senior School Interview, 25.02.15).

Grade Point Average (GPA) is also calculated and utilised to evaluate student performance and “buy-in” of the academic accelerate student pathway programme (particularly in Years 12 and 13).

We’re looking at the kids [their results] and saying how have they performed based on being given the Level 3 [as a Year 12].

Since 1982, boys have been awarded Academic Ties and ‘Colours’ awards in acknowledgment of academic ability and these are keenly sought after. GPA is used to determine the awarding of ‘*Academic Colours*’ which requires attaining a GPA of 70 or above in their best four subjects in NCEA (in Year 12 and 13).

With these kids [on the Academic Register/accelerate student pathway], I think they are stimulated by the competitive element of performing best against the [NCEA] standards ... The evidence is that kids in the Gifted and Talented Programme invariably go on and are scoring scholarship grades (Assistant Rector Senior School Interview, 25.02.15).

What does the school data say?

Analysis was carried out on supplied Year 9 MidYIS scores (2011-2014); MidYIS Standard Residual data (2011-2014); GPA data (2009-2014); NCEA data (2014); and scholarship recipient information to provide additional evidence in support of qualitative data acquired through the interviews, focus groups and questionnaire responses pertaining to efficacy and evaluation measures.

Year 9 MidYIS data

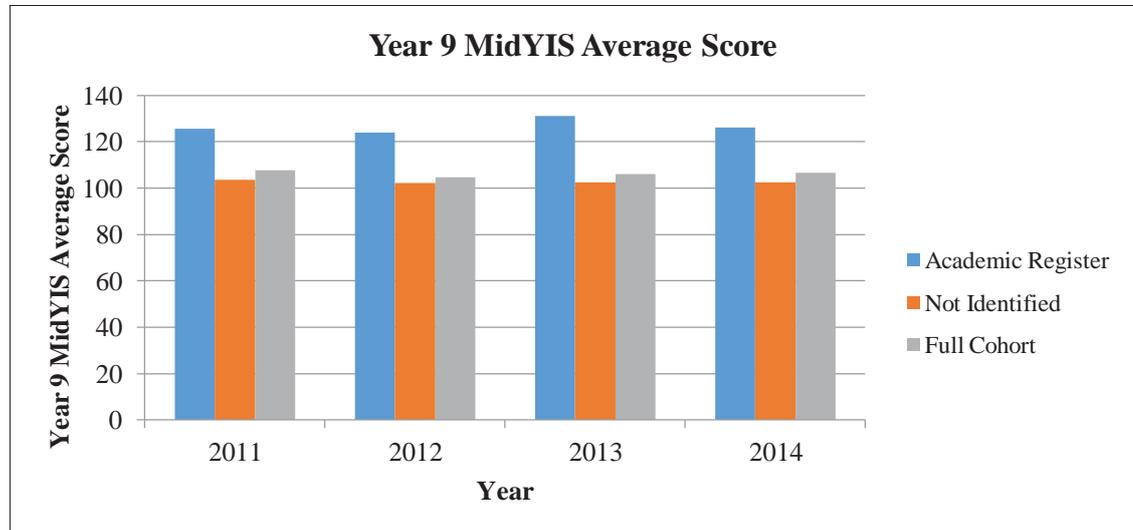


Figure 2. Year 9 MidYIS Average Score (2011-2014)

MidYIS data (2011-2014) indicated that those on the ‘Academic’ register are consistently achieving a higher Year 9 MidYIS average score (ranging from 125.61-131.27) than those not identified (ranging from 102.12-103.59) and also when compared with the full cohort (ranging from 104.83-107.80), therefore providing substantiation for the use of this data to inform identification (see Figure 2.).

MidYIS standard residual (value added) data

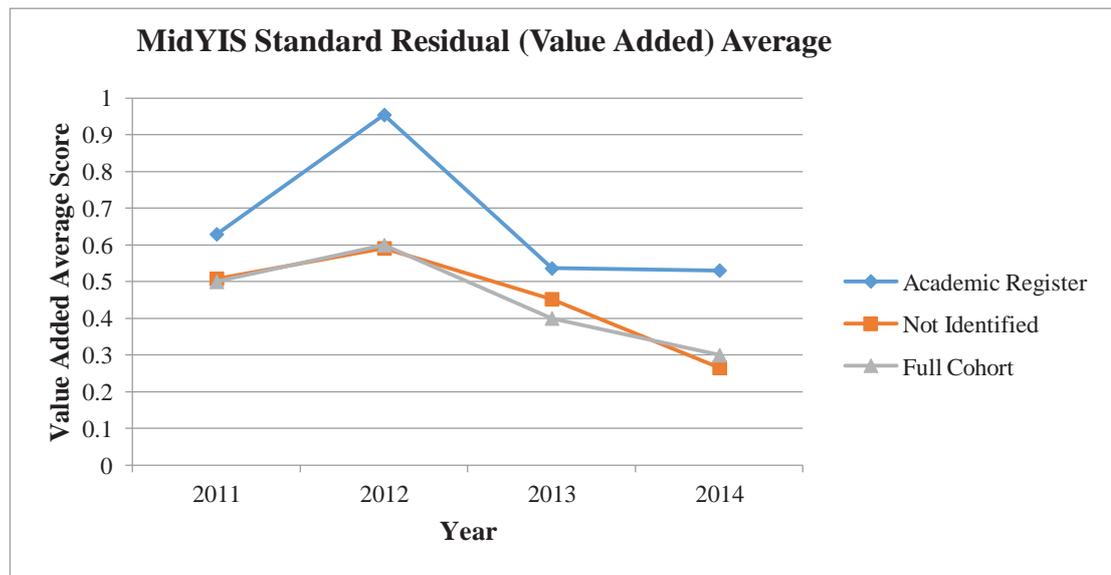


Figure 3. MidYIS Standard Residual Average (2011-2014)

Note. The standard residual score shows progress of the student, calculated as the number of standard deviations from the MidYIS cohort average of 0.0. A score close to 0.0 indicates that the student kept pace as expected, a positive score indicates better progress than expected and a negative score indicates slower than expected progress.

When looking at MidYIS standard residual (value added) average data (2011-2014), again those on the ‘Academic’ register as a Year 9 student (from 2009-2012) demonstrated greater value added at Year 11 (from 2011-2014) than their counterparts every year in this data set, and in particular in 2012 (see Figure 3.).

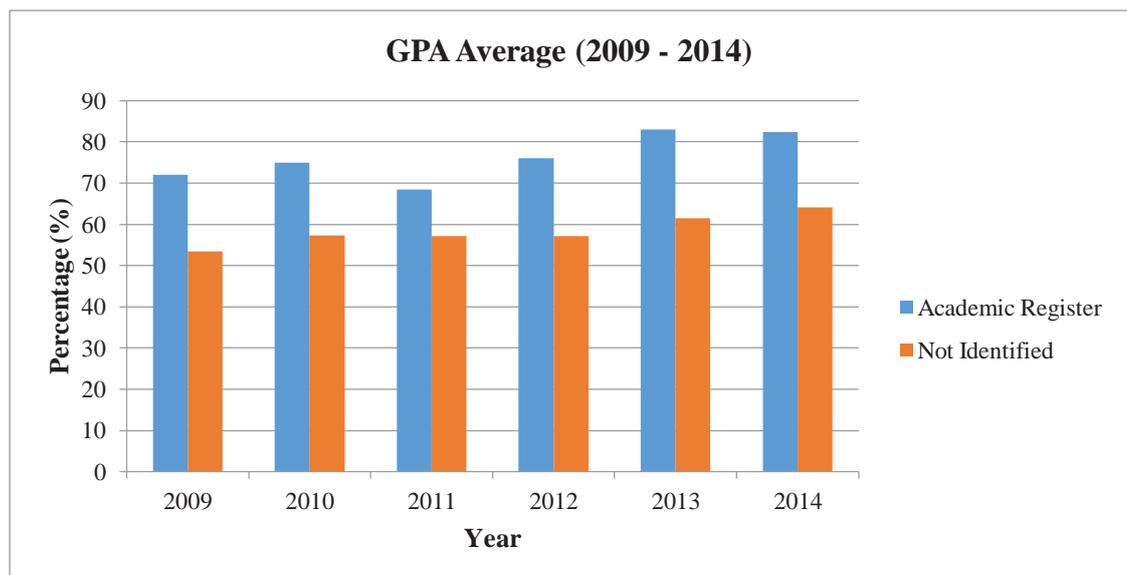


Figure 4. GPA Average Score (2009-2014)

Note. Grade Point Average (GPA) is a calculation that turns students' NCEA grades into a percentage grade whereby an Excellence Grade is worth four; a Merit is worth three; and an Achieve is worth two (e.g., if a student attains a Merit grade for a 4 credit Achievement Standard, 12 points go towards the total GPA).

When looking at GPA (derived from the students' best four NCEA Level 3 subjects), students on the 'Academic' register are scoring a higher GPA average than their counterparts (all of whom undertook 5 or 6 NCEA Level 3 subjects in one year's study) across this time span (2009-2014), with 'Academic' register students GPA average range from 68 (2011) to 83 (2013) compared to their counterparts range from 53 (2009) to 64 (2014) (see Figure 4.).

Total NCEA merit and excellence credits gained data

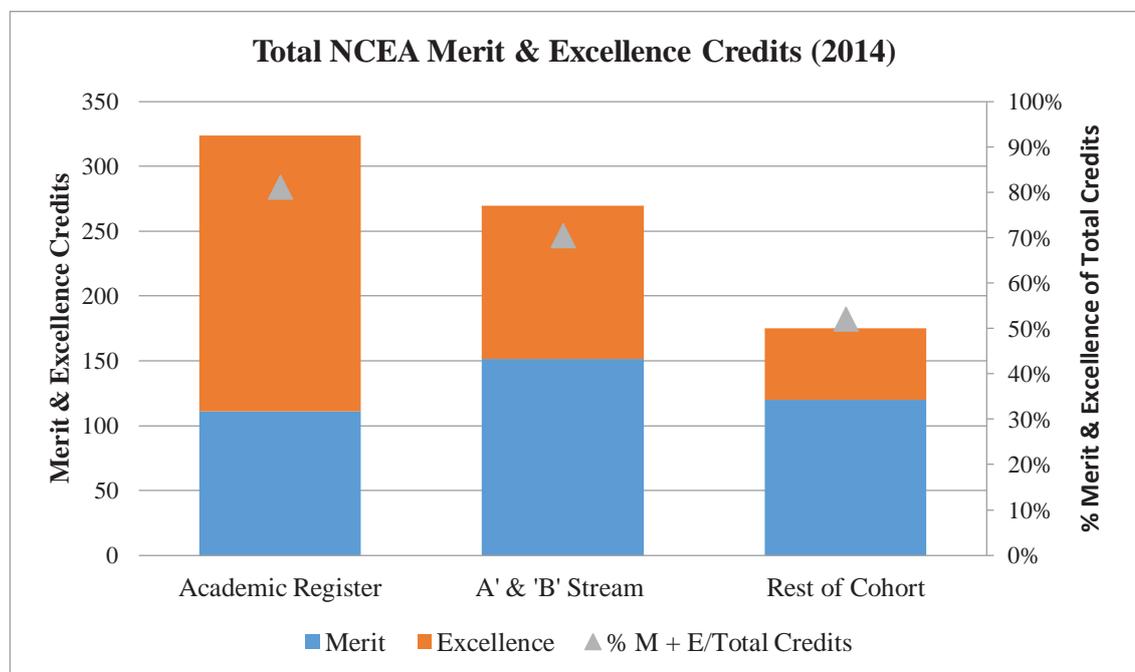


Figure 5. Total NCEA Merit & Excellence Credits (2014)

When looking at one sample set of Year 13 students (2014), it is evident that those on the 'Academic' register are scoring a higher average number of Excellence Credits (213 credits) and Merit/Excellence total credits (81%) than their similar ability counterparts ('A' and 'B' Stream) (118 credits; 70%) as well as the rest of their cohort (55 credits; 52%) over their full course of NCEA study (see Figure 5.).

Scholarship recipient data

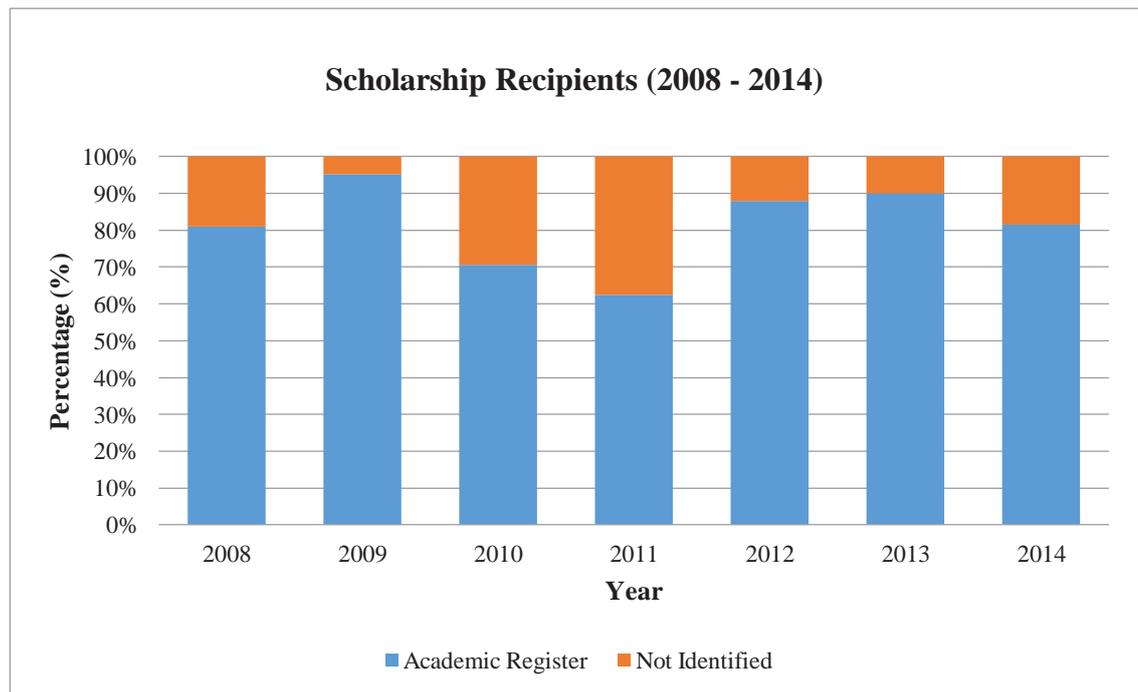


Figure 6. Scholarship Recipients (2008-2014)

Analysis of scholarship recipient data indicated that the number of scholarships awarded over this time period (2008-2014) ranged from 17 (in 2010) through to 33 (in 2012). When comparing scholarships gained, the trend is that those on the ‘Academic’ register are gaining a significantly higher percentage of the total scholarships awarded every year in this data set ranging from 63% (2011) to 95% (2009) compared with their not-identified counterparts ranging from 5% (2009) to 38% (2011) (see Figure 6.).

CHAPTER 5

DISCUSSION

Introduction

This case study was carried out to provide an in-depth look at one school's journey and current practices in identification and provisions for gifted and talented students through a multi-method framework approach. Themes for discussion that emerged through the key research questions and research findings include: the interrelationship between definition, characteristics, identification, provisions and evaluation; the importance of on-going school-wide professional development, a shared knowledge and understanding of gifted education and involvement of key stakeholders; and sustainability.

The interrelationship between definition, characteristics, identification, provisions, and evaluation

Whilst the concept of giftedness and talent is of central importance, its meaning is illuminated by the characteristics of individuals said to display exceptional behaviours compatible with the definition. Not only does an interactive process exist between definition and behavioural characteristics but this interaction also serves to enhance the validity of the conceptualisation of giftedness and talent: "gifted is as gifted does" (Hill, 1977 cited in McAlpine & Moltzen, 2004 pg. 36). Therefore, the interrelationship between definition, characteristics, identification, provisions and evaluation are critically important in understanding the totality of gifted education (McAlpine & Moltzen, 2004; Ministry of Education, 2000).

With reference to the underlying principles of identifying gifted and talented students (Ministry of Education, 2000), "schools should be employing multiple methods of identification which are appropriate to different domains of giftedness and talents". Identification that recognises the multiple manifestations of giftedness and the developmental nature of talent development should also act as a 'mediating link' between a school's definition and the differentiated provisions (Ministry of Education, 2000; Pfeiffer, 2002). The literature strongly advocates that using multiple criteria or "multiple windows to include" based on various sources for identification is desirable practice, particularly when undertaken in partnership with parents and teachers representative of the diversity in the community served (Robinson, Shore, & Enersen,

2007). A critical issue is the attractiveness of data like test scores or other quantitative data because they can be easily manipulated. Thus, identification should focus more on gifted student's needs and less on labelling or identification as such. The onus then falls on the provisions to ensure that the different talents for which identification then occurs are addressed by the programming provided and, vice versa, each of the criteria must be relevant to some provision. This means planning for individuals or small groups of students with particular strengths or needs, not necessarily in unison for all identified. The ultimate impact is not created only by the measures chosen, however, but by how those responsible for judgements use the information available and the policy framework within which the programme operates (Robinson, Shore, and Enersen, 2007).

This case study school's identification processes are comprehensive and consistent with their written definition of gifted and talented. Whilst a multi-method approach is utilised in the identification of gifted and talented students in the 'academic' area (primarily known and utilised by the GATE Coordinator/committee members), it was evident that the specific methods that constitute this approach and subsequent selection for provisions (e.g., withdrawal programmes) is not explicit to all key stakeholders and rather based largely on assumptions. Furthermore, whilst the definition and identification process acknowledges six areas of giftedness and talent, it is evident through staff, student and parent perspectives that a major focus at this school is the identification and development of academic abilities or the 'academic excellence' cornerstone. Identification and subsequent provisions to meet the needs of students on the register in the remaining five areas are therefore less apparent. Provisions need to be linked explicitly to identification (Pfeiffer, 2002). Schools also need to broaden the scope of their provision to acknowledge and provide for non-academic gifted and talented students (ERO, 2008).

If the multi-methods of identification are written into procedures for all teachers to follow (and made available and transparent to key stakeholders), this should not only promote a more holistic picture of a student's potential and demonstrated gifts and talents but also better enable triangulation of findings to further inform professional judgements. This should also encourage those involved in the process to look beyond the obvious and consider students with learning or behaviour difficulties, those who are twice-exceptional, and other typically underrepresented groups (ERO, 2008).

Recent research into provisions has recommended that schools should aim to provide programmes that match the individual learning needs of all students (Young & Balli, 2004), and “gifted and talented students should be offered a curriculum rich in depth and breadth, and at a pace commensurate with their abilities” (Riley et al., 2004, page 278). The accelerate pathway programme of study (e.g., at NCEA level) at this school coupled with results gained by students identified on the ‘Academic’ register (e.g., GPA, NCEA Excellence grades, Scholarships) appear to provide evidence in support of this. The Year 9 and 10 withdrawal programmes and Year 13 Philosophy group in tandem with positive student feedback also provide additional substantiation that the school is meeting the needs of these students with these provisions. Furthermore, having opportunities to spend time with like-minded others has been purported to be important to the well-being and academic advancement of gifted learners (ERO, 2008; Ministry of Education, 2012; Riley, Sampson, White, Wardman, & Walker, 2015). It is evident that this school is providing these opportunities through such practices as ability streaming, withdrawal programmes, acceleration, and special classes (e.g, Year 13 Philosophy group). Therefore, also providing opportunities for strengthening connections between self-concept, motivation, and achievement, which in turn enhance well-being and increase achievement (Riley et al., 2004; Wolf & Chessor, 2011).

Effective evaluation of gifted and talented programmes is systematic and comprehensive (both formative and summative), and findings are used to inform the ongoing nature of the programme (ERO, 2008). Whilst the GATE Coordinator evaluates the programme via the Annual Report and through student evaluation forms for the withdrawal programme, this is largely “self-review” centred around individual reflection on how particular actions have impacted on students.

We’ve got something happening in school and because we don’t know ... it’s pretty hard to judge what’s effective or successful ... I would argue that anything [GATE Coordinator] does is going to add value to those boys ... she is passionate about gifted and talented students ... and that may reflect in exam results, University paper results (Assistant Rector Junior School Interview, 11.03.15).

Riley and Moltzen (2010) stress the importance of a dynamic relationship between programme development and self-review, with each “informing and shaping the other”. GATE programmes need to be transparent to staff, students and

parents/whānau. By having robust self-review of effectiveness of the school's policy and provision for gifted and talented students that consults all key stakeholders and acts on arising recommendations, the process is then not only transparent but also 'owned' by the whole school community (ERO, 2008). Effective self-review should not only look at a range of expected outcomes but also use a mix of quantitative and qualitative measures to assess the extent to which the programme achieved them. Furthermore, a collaborative approach increases validity of self-view by providing a diverse range of perspectives, including those of students, teachers, and whānau. It is also likely to have greater impact when school leaders/management participate in the process (Robinson et al., 2009).

Ongoing school-wide professional development

Professional development remains one of the keys to growth and sustainability of gifted programmes. It is not enough for teachers to rely upon generic characteristics and identification lists to support a gifted and talented programme (Tapper, 2012). Furthermore, when teachers with expertise leave the school, this can create a significant knowledge gap (ERO, 2008). Therefore, all teachers within a school need to be knowledgeable about the concept of giftedness and talent that ultimately drives their practice. Sound staff-wide professional development around current, global conceptions of giftedness and talent and in linking these global concepts to the needs of a particularly New Zealand cultural milieu is recommended. Ongoing school-wide professional development should not only build capability for teachers to engage with different conceptualisations of giftedness as a first step in framing effective practice that aligns with the particular multi-dimensional conceptualisation of giftedness and talent adopted at this school but also increase ownership, accountability and sustainability for meeting the needs of these students (ERO, 2008; Tapper, 2012). This should also strengthen the interrelationship between how this school conceptualises giftedness and talent (within their own context), and the identification and programming that is then developed (Tapper, 2012).

Cultivating a shared understanding of gifted and talented education

How can we really support it as a school if we don't really understand the process ... how many staff really know what [GATE Coordinator's] doing and what she is trying to achieve. I would argue very few ... to be valued they [staff]

need to understand it and to understand it they have to get in there and get their hands dirty and work alongside [GATE Coordinator] (Assistant Rector Junior School Interview, 11.03.15).

The sustainability of any change is dependent on getting the right people “on the bus” (Collins, 2001) or the *right people on board, and not there just to pay lip service* (Assistant Rector Junior School Interview, 11.03.15). Just one negative member in a significant position can hinder the sustainability of any new strategy. Considerable time, effort and energy are put into any change, and therefore, the sustainability of a new initiative depends on leadership, structures and systems (Wardman & Hattie, 2012). Meeting the needs of gifted and talented students is a complex task with broad ranging responsibilities that calls for a collaborative team approach (Kirk, Gallagher, & Coleman, 2014).

Whilst academic provisions for gifted and talented students are evident in school policies and documentation, and academic achievement is certainly encouraged, valued and supported, and substantiated in results gained by students, the withdrawal programme is largely viewed by staff as a stand-alone programme or “the [GATE Coordinator’s] programme”. Furthermore, despite the wide range of provisions and programmes available for gifted and talented students at this school across all four cornerstones, a school-wide shared knowledge and understanding of this is not apparent.

Looking at this school’s journey coupled with staff, student and parent participant voice, it appears timely to review and cultivate a current shared understanding of a school-wide conceptualisation of giftedness, which in turn should not only provide teachers with a sounder framework for underpinning pedagogical decisions (including curricula, teaching practices, and programming) but also promote “buy-in” and increased advocacy for the needs of gifted and talented students educationally, emotionally and socially (Tapper, 2012).

In order for a programme to survive, it must not only be effective but also address issues considered relevant, and produce outcomes that are valued by all parties concerned (Carter, 2010). Communication is the key for the efficient running of a programme (Grubbs & Boes, 2009).

Maybe we need to start talking gifted and talented more often ... and what she is trying to achieve and how and why (Assistant Rector Junior School Interview, 11.03.15).

There also needs to be clarification of what the gifted and talented programme encapsulates at this school and who the responsibility of provision falls on. Is the gifted and talented programme viewed as the “G & T programme” coordinated by the GATE Coordinator and solely her responsibility? Or does it cover the wide range of provisions across all four cornerstones and programming options available at this school to maximise the educational experiences of gifted boys as outlined in written communication to parents and thus implying a more collaborative school-wide approach in delivery (Brochure for Parents).

Analysis of questionnaire responses confirmed this emerging trend that participants involved would like more information about identification and provisions for gifted and talented students at this school. Such details should be communicated to all key stakeholders involved including staff, parents, and students identified (Chipman, Roy, & Naylor, 2001), which in turn should also further promote “buy in” and social validity.

Key stakeholder involvement

Research points to a direct link between parents’ involvement in their child’s education and subsequent achievement, attitude, and behaviour towards school (Campbell & Verna, 2007). Gagné also identifies several catalysts that help convert potential into achievement and amongst these are the contributions of parents (Brochure to Parents). Furthermore, parents and families have been described as “the most critical component in the translation of talent, ability and promise into achievement for gifted individuals” (Olszewski, Kulieke, & Buescher, 1987, p.6).

Parents often possess additional information about their child’s abilities (including strengths and weaknesses) that may not be recognised in the regular classroom setting and thus may provide different views of giftedness from teachers (Jolly & Matthews, 2012). Furthermore, given the importance of whānaungatanga (establishing a culturally responsive pedagogy), nomination of gifted Māori students should be extended to whānau members and the Māori community, and parents/whānau involvement thereafter for those identified in the area of ‘Cultural Empathy’ at this

school to promote holistic programming that meets the two interrelated spheres of development for Māori students: ‘hinengaro’ or intellectual and affective domains (Bevan-Brown, 2009).

It is evident that this school invites and considers parental input in the identification process. However, the perception that parents are typically reluctant to nominate their children prevails. With increased specificity and transparency in communication (e.g., about the identification process and methods employed, the nature of their child’s giftedness, and the gifted and talented programmes available at this school), parents may feel more empowered to contribute and to advocate for and nurture their child’s needs (Russell & Riley, 2011). The use of parents as sources of additional information in tandem with other methods of identification utilised by the school should also serve to address any biases that can arise from teacher identification (McBee, 2006).

Whilst there was intention to notify all parents of students identified on the registers since inception of the gifted and talented programmes, it was evident particularly in parent questionnaire responses that only parents of students on the ‘Academic’ register who are involved in the withdrawal programmes are informed about their son’s identification and consequent invitation to participate. Once identified and included in the annual register, all parents (from all six areas of giftedness) should be informed, as the knowledge of their own child’s ability (and specific area(s) they were identified) not only informs parents’ perceptions and understanding of the school’s conceptualisation of giftedness and talent but also better facilitates parental involvement and support throughout their son’s education to maximise their potential at this school.

Sustainability

Sustainability can be viewed from several angles: financial sustainability; programme sustainability; and the sustainability of outcomes for stakeholders (Riley & Moltzen, 2010). School-wide development of programmes for gifted and talented students should ideally include representation of key stakeholders: the entire school community; administrative and teaching staff, the Board of Trustees, parents/whānau, other relevant community members, and gifted and talented students themselves. It is essential that the gifted and talented programme is ‘owned’ by the school community because gifted education should complement, rather than be in conflict with, school

culture and its ethos (Ministry of Education, 2000). This case study school's gifted and talented programme has essentially evolved from the work of a few key staff members driving inception in 2007 with significant developments made since. However, the coordination and responsibility of gifted and talented education primarily falls on an individual staff member, the GATE Coordinator, with support from the two GATE committee members.

The GATE Coordinator role is central to the introduction, implementation, development, success and sustainability of gifted and talented programmes as evidenced in this case study school.

By and large I think [GATE Coordinator] has driven it ... if she was to leave, what's been put in place would not be sustainable ... we don't have systems in place that really support it (Assistant Rector Junior School Interview, 11.03.15).

Proactive leadership in developing student and parent voice and translating this into affirmative action requires ongoing communication for positive change in a number of areas of the school. Advocacy permeates all aspects of this role to ensure that practice is inclusive, processes are transparent and that outcomes are achieved. This means that policies, resources and programmes reflect and meet the needs of the school's gifted and talented students. The GATE Coordinator's ability to form positive relationships and build this capability in others is central to its success. Excellent intrapersonal and interpersonal are also fundamental to leading the process (Russell & Riley, 2011).

Even when good policies and procedures are in place, if a strong shared understanding of gifted and talented education is missing or limited within the school and wider community, it can be difficult for leaders (GATE Coordinators and Senior Management Teams) to sustain good practices. In order to cultivate sustainability, gifted and talented education needs to be an intrinsic part of the school's culture (including a shared philosophy/pedagogy of its place in the regular classroom and other relevant contexts) and fostered through clear directions from school leadership coupled with quality ongoing school-wide professional development to build teacher capability to meet the needs of all students identified by the school (ERO Report, 2008). Furthermore, ongoing evaluation, reflection, and open communication should not only enable improvement but also increase the likelihood that this process will be sustainable (Riley & Moltzen, 2010).

It's [the GATE Coordinator role] been left reasonably open to let her [current GATE Coordinator] explore that area as much as anything rather than written down (Rector Interview, 30.03.15).

Although the GATE Coordinator tabled a generic job description to the GATE Committee in 2007 for discussion and review (Meeting Minutes, 22.11.07) and the job description was specified on the agenda in several subsequent meetings (Meeting Minutes, 22.12.07; 28.01.08; 03.03.08; 22.05.08), a formalised GATE Coordinator job description still does not exist at this school, nor has a formal appraisal of the role taken place. Therefore, posing potential issues including lack of shared understanding and clear parameters of the role and responsibilities, questions of validity with evaluations carried out as well as sustainability of this position and the programmes in place if personnel changes arise. According to best practice, the GATE Coordinator needs: (a) a job description and profile that is understood by all staff; (b) the support of school leadership and Board of Trustees; (c) a time allocation to perform duties as well as time for planning and professional reading, learning and development; and (d) a leadership role in the school (ERO, 2008).

Significant Senior Management personnel changes within the GATE Committee has also occurred since conceptualisation of the Gifted and Talented Programme including a new Assistant Rector Junior School in 2008; Rector in 2010; and Assistant Rector Junior School in 2013. With these changes in personnel and subsequent changes in the make-up of the committee coupled with less frequent Committee Meetings, it is evident that the momentum of gifted and talented education at this school has shifted since 2011. “Area of giftedness and talent had fallen off the radar of most members of staff and many did not contribute to the identification process” (Meeting Minutes, 14.02.11). It is also important to note that only approximately 40% of staff involved in the initial staff-wide professional development processes and consultation (in 2007) remain in today’s staff. Induction of new staff to the gifted and talented programme may address this significant barrier (ERO, 2008).

CHAPTER 8

CONCLUSION

Introduction

This chapter concludes this thesis through the acknowledgment of limitations in this case study research and methodology; recommendations for further investigation at this school; and implications for research, policy and practice.

Limitations of this case study research

As this case study was carried out in only one boy's secondary school in New Zealand, generalisability is limited in the sense that its findings cannot necessarily be applied to programmes for all gifted and talented students in all contexts. Nonetheless, an attempt has been made to provide sufficient information and detail so that others can determine which findings may be applicable to their context, and therefore allow some transferability.

Obtaining high response rates can be challenging when conducting online survey research. Multiple factors can impact response rate, such as survey invitation, appearance, topic, perceived security and privacy, survey design (e.g., length, quality of questions, and level of engagement), timing of dissemination, trust and relationship with sender/researcher, incentives, and follow-up reminders (Sue & Ritter, 2012). Whilst the Staff Questionnaire did not yield a high response rate, the researcher is confident that qualitative data gathered from the staff focus group in tandem with the individual interviews presented a representative staff perspective to inform the key research questions. Furthermore, the credibility of the findings was assured through triangulation of methods and data used to unearth the multiple perspectives of those involved in the gifted and talented programme at this school.

It is also important to keep in mind that any data analysis carried out in this research is only as accurate as the data and documentation supplied by the school. It is important to note that in 2008, 2009 and 2015, 'Screening Lists' were supplied instead of registers, and therefore, data reported in those years may project higher numbers of students identified than actual. Two sample registers (2008 and 2015) were examined further to see whether students are identified in more than one area. In 2008, 165 names

were listed with 29 of these students identified in two or three areas. In 2015, 218 names were listed with 47 of these students identified in two to four areas. Therefore, reported annual numbers identified may also be higher than actual.

Although, the data analysis carried out to provide efficacy evidence does not provide a direct relationship with the Gifted and Talented Programme effects, conclusions can be hypothesised in terms of whether the programme contributes to learning and/or positive gains.

Response bias may also need to be taken into account, particularly with participants who have a vested interest and/or direct involvement in the identification and provisions for gifted and talented students at this school.

Recommendations for further investigation at this school

The data analysis carried out in this case study was based only on this school's student results. Whilst this provided evaluative evidence and substantiation for information gathered in the qualitative methods of this research regarding reported effectiveness and outcomes of the gifted and talented programme, the data could also be compared regionally and nationally with similar cohorts to provide additional evaluative, reliability and validity measures for this school. Further analysis could involve a closer look at outliers and emerging trends in the data to glean more information about specific factors that may be influencing or mediating results gained by students. For example, with reference to the MidYIS standard residual (value added) data (see Figure 3.), a marked increase in value added was evident in 2012 for those on the 'Academic' register with a reported standard residual of 0.95. Was this attributable to good identification when these students were in Year 9? Or due to the subsequent depth and breadth of provisions and programmes of study available post-identification? Or a combination of both identification and provisions factors? It is also important to consider theoretical models (e.g., the actiotope model of giftedness) and 'triadic reciprocity' effects that may be contributing to the manifestation of giftedness, talent and potential to achieve a more holistic picture about these demonstrated student gains and the implications of these results: all of which should inform best practice.

Implications for research, policy and practice

Although positive initiatives (including growth in specific policies for gifted and talented students) and changes across all aspects of gifted and talented education in New Zealand followed on from the Riley et al. (2004) investigation, barriers including funding, access to resources, time and people (e.g., school-wide “buy-in”) continue to impede gifted and talented identification and provisions (Riley & Bicknell, 2013; Smith, 2007). Programmes for gifted and talented students should not only be based on effective practice but also take into account research and literature in the field (e.g., studies of neuropsychological processing of gifted students synthesised with psycho-educational research) (Munro, 2013). The extent and effectiveness of identification and provisions relies heavily on the ability of classroom teachers, and therefore should also be supported by on-going high-quality school-wide professional development for teachers (Ministry of Education, 2004; 2012; Riley et al., 2004; Rowley, 2012). Furthermore, on-going evaluation utilising a responsive and collaborative approach (e.g., inclusive of a variety of programme stakeholders and external evaluation where possible) is a necessary aspect of gifted education and should examine all components by using a variety of methodologies so as to provide opportunities for ongoing self-review and improvement, increased outcomes for students, and increased programme efficacy and sustainability (Easter, 2011; Learning Media, 2000; Riley & Moltzen, 2011).

Final thoughts

There is no set formula to gifted and talented programmes; however, guiding principles are transferable and applicable across a continuum of approaches. There is no single programme that succeeds with all students, and systems level intervention can be conceptualised and achieved in different ways to address the diverse learning needs of all students. One size does not fit all in the development, implementation, maintenance and evaluation of gifted and talented programmes (Riley & Moltzen, 2010). Programmes like those targeted for gifted and talented students, irrespective of reported or perceived benefits, should continually consider accommodations or variations that could enhance efficacy and learning gains for students, and adapt according to the evolving ecological interplay between the educational setting and the specific learning needs of 21st Century learners (Learning Media, 2007).

REFERENCES

- Adams, J., Khan, H. T. A., Raeside, R., & White, D. (2007). *Research methods for graduate business and social science students*. New Delhi, India: Sage.
- Andres, L. (2012). *Designing & doing survey research*. London, UK: Sage.
- Assouline, S. G., Marron, M., & Colangelo, N. (2014). Acceleration: The fair and equitable intervention for highly able students. In J. A. Plucker & C. M. Callahan (Eds.), *Critical issues and practices in gifted education: What the research says*. (2nd Ed.) (pp. 15-28). Waco, TX: Prufrock Press.
- Bevan-Brown, J. (2000). Running the gauntlet: A gifted Maori learner's journey through secondary school. In *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. (2003). *The cultural self-review: providing culturally effective, inclusive education for Māori learners*. Wellington, New Zealand: New Zealand Council for Educational Research.
- Bevan-Brown, J. (2004). Gifted and talented Maori learners. In D. McAlpine & R. Moltzen (Eds.). *Gifted and talented: New Zealand perspectives* (2nd ed., pp. 171-197). Palmerston North, New Zealand: Kanuka Grove Press.
- Bevan-Brown, J. (2009). Identifying and providing for gifted and talented Maori students. *APEX: The New Zealand Journal of Gifted Education*, 15(1).
- Blatter, J., & Haverland, M. (2012). *Designing case studies: Explanatory approaches in small-n research*. New York, NY: Palgrave MacMillan.
- Borland, J. H. (1997). The construct of giftedness. *Peabody Journal of Education*, 72(3/4), 6-20.
- Borland, J. H. (2014). Identification of gifted students. In J. A. Plucker & C. M. Callahan (Eds.), *Critical issues and practices in gifted education: What the research says*. (2nd Ed.) (pp. 323-342). Waco, TX: Prufrock Press.
- Bourne, J., & Sturges, A. (2006). If anyone can, Kiwis can: Every teacher, a teacher of gifted learners. *The Australasian Journal of Gifted Education*, 15(1), 44-50.

- Campbell, J. R., & Verna, M. A. (2007). Effective parental influence: Academic home climate linked to children's achievement. *Educational Research & Evaluation, 13*, 501-519.
- Carter, S. L. (2010). *The social validity manual: A guide to subjective evaluation of behaviour interventions in applied behaviour analysis*. London, UK: Elsevier.
- Chipman, M., Roy, N., & Naylor, C. (2001). Implementing and evaluating a school-based peer tutoring programme. *British Columbia Teachers' Federation*.
- Collins, J. (2001). *Why some companies make the leap and...others don't*. Harper Business.
- Cutler, S., Riley, T., MacIntyre, B., & Bicknell, B. (2010). Mentoring: A symbiosis putting new life into learning. *The Australasian Journal of Gifted Education, 19*(20), 49-58.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4 ed.). Boston: Pearson Education.
- DeWalt, Kathleen M. & DeWalt, Billie R. (2002). *Participant observation: A guide for fieldworkers*. Walnut Creek, CA: AltaMira Press.
- Easter, A. (2011). Identification of gifted and talented students. In R. Moltzen (Ed.), *Gifted and talented: New Zealand perspectives, 3rd Ed* (pp. 204-251). Auckland, New Zealand: Pearson.
- Edwards, J. (2005). *How to identify gifted and talented students: A practical guide to help you accurately identify gifted and talented students*. Nelson, New Zealand: ThinkShop.
- Education Review Office. (2008). *Schools' provision for gifted and talented students: Good practice*. Wellington, New Zealand: Crown.
- Erlandson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (1993). *Doing naturalistic inquiry: A guide to methods*. Newbury Park, CA: Sage.
- Feldhusen, J. F., & Jarwan, F. A. (2000). Identification of gifted and talented youth for educational programs. In K. A. Heller, F. J. Mönks, R. J. Sternberg, & R. F.

- Subotnik (Eds.), *International handbook of giftedness and talent (2nd ed., pp.271-282)*. Oxford, UK: Elsevier.
- Fowler, F. J. (2002). *Survey research methods (3rd ed.)*. Thousand Oaks, CA: Sage.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education (3rd ed.)*. New York, NY: McGraw-Hill.
- Fraser, D. (2013). Keeping Gifted Education on the Agenda: Interview with Professor Roger Moltzen. *APEX: The New Zealand Journal of Gifted Education, 18*(1).
- Gideon, L., & Moskos, P. (2012). Interviewing. In L. Gideon (ed.), *Handbook of Survey Methodology for the Social Sciences* (pp. 109-118). New York, NY: Springer.
- Grassinger, R., Porath, M., & Ziegler, A. (2010). Mentoring the gifted: A conceptual analysis. *High Ability Studies, 21*(1), 27-46.
- Gubbins, E. J. (2014). Enrichment. In J. A. Plucker & C. M. Callahan (Eds.), *Critical issues and practices in gifted education: What the research says. (2nd Ed.)* (pp. 223-236). Waco, TX: Prufrock Press.
- Gusky, T. R. (2002). *Evaluating professional development*. Thousand Oaks, California: Corwin Press.
- Grubbs, N., & Boes, S. R. (2009). The effects of the peer tutoring programme. *GSCA Journal, 16*(1), 21-31.
- Hancock, D. R., & Algozzine, B. (2011). *Doing case study research: A practical guide for beginning researchers (2nd Ed.)*. New York, NY: Teachers School Press.
- Houghton, C. (2014). Capturing the pupil voice of secondary gifted and talented students who had attended an enrichment programme in their infant school. *Gifted Education International, 30*(1), 33-46.
- Jolly, J. L., & Matthews, M. S. (2012). A critique of the literature on parenting gifted learners. *Journal for the Education of the Gifted, 35*(3), 259-290.
- Kauffman, J. M., & Landrum, T. J. (2009). *Characteristics of Emotional and Behavioural Disorders of Children and Youth (9th Edition)*. Upper Saddle River, NJ: Pearson.

- Kirk, S., Gallagher, J. J., & Coleman, M. R. (2014). *Educating exceptional children* (14th ed.). Belmont, CA: Wadsworth-Cengage.
- Learning Media. (2007). *The New Zealand Curriculum*. Wellington, New Zealand: Learning Media.
- Learning Media. (2000). *Gifted and talented students: Meeting their needs in New Zealand schools*. Wellington, New Zealand: Learning Media.
- Leech, N. L., Collins, K. M. T., Jiao, Q., & Onwuegbuzie, A. J. (2011). Mixed research in gifted education: A mixed research investiGATEion of trends in the literature. *Journal for the Education of the Gifted*, 34(6), 860-875.
- Luus, S., & Watters, J. J. (2012). Gifted early adolescents' negotiating identity: A case study of self-presentation theory. *The Australasian Journal of Gifted Education*, 21(2), 19-32.
- Macleod, R. (2004). Educational provision: Secondary Schools. In D. McAlpine & R. Molzen (Eds.). *Gifted and talented: New Zealand perspectives* (2nd ed.) (pp. 239-262). Palmerston North, New Zealand: Massey University ERDC Press.
- Manzo, A. N., & Burke, J. M. (2012). Increasing response rate in web-based/internet surveys. In L. Gideon (ed.), *Handbook of Survey Methodology for the Social Sciences* (pp. 327-343). New York, NY: Springer.
- McAlpine, D., & Moltzen, R. (Eds.). (2004). *Gifted and talented: New Zealand perspectives* (2nd ed.). Palmerston North, New Zealand: Massey University ERDC Press.
- McAlpine, D. (2004). What do we mean by gifted and talented? In D. McAlpine & R. Moltzen (Eds.). *Gifted and talented: New Zealand perspectives* (2nd ed.) (pp. 33-66). Palmerston North, New Zealand: Massey University ERDC Press.
- McBee, M. T. (2006). A descriptive analysis of referral sources for gifted identification screening by race and socioeconomic status. *Journal of Secondary Gifted Education*, 17, 103-111.
- McDonough, E. (2004). Developing New Zealand's gifted education policy. *The Australasian Journal of Gifted Education*, 13(2), 35-40.

- McDonough, E., & Rutherford, J. (2005). New Zealand's gifted and talented education policy. *APEX: The New Zealand Journal of Gifted Education*, 14(1).
- Mendaglio, S. (2003). Qualitative case study in gifted education. *Journal of the Education of the Gifted*, 26(3), 163-183.
- Merriam, S. B. (1998). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Ministry of Education. (2000). *Gifted and talented students: Meeting their needs in New Zealand schools*. Wellington, New Zealand: Learning Media.
- Ministry of Education. (2002). *Initiatives for gifted and talented learners*. Wellington, New Zealand: Learning Media.
- Ministry of Education. (2012). *Gifted and talented students: Meeting their needs in New Zealand schools*. Wellington, New Zealand: Learning Media.
- Moltzen, R., Riley, T., & McAlpine, D. (2001). Gifted education under construction: A blueprint for New Zealand. *APEX The New Zealand Journal of Gifted Education*, 13(1), 5-15.
- Moltzen, R. (2003). Gifted education in New Zealand. *Gifted Education International*, 18(2), 139-152.
- Moltzen, R. (Ed.). (2011). *Gifted and talented: New Zealand perspectives*, 3rd Ed. Auckland, New Zealand: Pearson.
- Moon, S. M. (1991). Case study research in gifted education. In N. K. Buchanan, & J. F. Feldhusen. *Conducting Research and Evaluation in Gifted Education* (pp. 157-178). New York, NY: Teachers School Press.
- Munro, J. (2013). *High-ability learning and brain processes: How neuroscience can help us to understand how gifted and talented students learn and the implications for teacher*. Paper presented at the Research Conference, Melbourne, Australia.
- Nardi, P. M. (2014). *Doing survey research: A guide to quantitative methods* (3rd Ed.). Boulder, CO: Paradigm Publishers.

- Niwa, T. (1998/1999). Maori students with special abilities. *APEX*, 11/12(1), 3-8.
- Olszewski, P., Kulieke, M., & Buescher, T. (1987). The influence on the family environment on the development of talent: A literature review. *Journal of the Education of the Gifted*, 11, 6-28.
- Onwuegbuzie, A. J., Collins, K. M. T., Leech, N. J., & Jian, Q. G. (2010). Mixed data collection and analysis for conducting research on giftedness and beyond. In B. Thompson & R. F. Subotnik (Eds.), *Research Methodologies for Conducting Research on Giftedness* (pp. 113-143). Washington, DC: American Psychological Association.
- O'Reilly, C. (2006). Maximising potential – both academic and social-emotional. In Chris. M. M. Smith (Ed.), *Including the gifted and talented: Making inclusion work for more able learners* (pp. 102-118). London, UK: Routledge.
- Page, A. (2006). Three models for understanding gifted education. *Kairaranga*, 7(2), 11-15.
- Pfeiffer, S. I. (2002). Identifying gifted and talented students: Recurring issues and promising solutions, *Journal of Applied School Psychology*, 19:1, 31-50.
- Phillipson, S. N. (2007). A framework for the study of sociocultural perspectives of giftedness. In S. N. Phillipson & M. McCann (Eds.), *Conceptions of giftedness: Sociocultural perspectives* (pp. 1-34). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.
- Pyryt, M. C. (2004, June). Helping gifted students cope with perfectionism. *Parenting for High Potential*, 10-14.
- Pyryt, M. C., & Bosetti, B. L. (2006). Accommodating gifted learners in regular classrooms. In Chris. M. M. Smith (Ed.), *Including the gifted and talented: Making inclusion work for more able learners* (pp. 142-155). London, UK: Routledge.
- Reis, S. M., & Sullivan, E. E. (2009). Characteristics of gifted learners: Consistently varied; refreshingly diverse. In F. A. Karnes, & S. M. Bean (Eds.), *Methods and materials for teaching the gifted (3rd Ed.)* (pp. 3-35). Waco, TX: Prufrock Press.

- Renzulli, J. S. (1984). The triad/revolving door system: A research-based approach to identification and programming for the gifted and talented. *Gifted Child Quarterly*, 28, 163-171.
- Renzulli, J. S. (1990). A practical system for identifying gifted and talented students. *Early Child Development and Care*, 63(1), 9-18.
- Riley, T. L. (2000). Cultural identity: A glimpse down under. *Gifted Child Today*, 23(3), 46.
- Riley, T. (2009). Out of school provisions for gifted and talented students. Auckland, New Zealand: Massey University.
- Riley, T. L. (2011a). Competitions for showing innovative and creative talents. *Gifted and Talented International*, 26(1), 63-70.
- Riley, T. L. (2011b). Curriculum models: The framework for gifted and talented education. In R. Moltzen (Ed.), *Gifted and talented: New Zealand perspectives* (3rd ed.), (pp.304-339). Auckland, New Zealand: Pearson.
- Riley, T. L. (2011c). *Teaching gifted students in the inclusive classroom*. Waco, TX: Prufrock Press.
- Riley, T. (2013). Including gifted and talented students: Shifting our mindsets from exclusive to inclusive. In Centre of Excellence for Research in Inclusive Education (Eds.), *Inclusive Education: Perspectives on Professional Practice* (pp. 189-203). Auckland, New Zealand: Dunmore Publishing.
- Riley, T., Bevan-Brown, J., Bicknell, B., Carroll-Lind, J., & Kearney, A. (2004). *Gifted and talented education in New Zealand: A summary of research on the extent, nature, and effectiveness of planned approaches in New Zealand schools for identifying and providing for gifted and talented students*. Wellington, New Zealand: Ministry of Education.
- Riley, T., & Bicknell, B. (2013). Gifted and talented education in New Zealand Schools: A Decade Later. *APEX: The New Zealand Journal of Gifted Education*, 18(1). Retrieved from www.giftedchildren.org.nz/apex.

- Riley, T., & Moltzen, R. (2010). *Enhancing and developing Talent Development Initiatives: Research to determine effectiveness*. Wellington, New Zealand: Ministry of Education.
- Riley, T., & Moltzen, R. (2011). Learning by doing: Action research to evaluate provisions for gifted and talented students. *Kairaranga, 12*(1), 23-31.
- Riley, T., Sampson, C., White, V., Wardman, J., and Walker, D. (2015). Connecting like-minded learners through flexible grouping. *Set 2015: No. 1*. Wellington, New Zealand: NZCER Press, 25-33.
- Robinson, A., Shore, B. M., & Enersen, D. L. (2007). *Best practices in gifted education: An evidence-based guide*. Waco, Texas: Prufrock Press.
- Rowley, J. L. (2008). Teaching strategies to facilitate learning for gifted and talented students. *The Australasian Journal of Gifted Education, 17*(2), 36-42.
- Russell, V., & Riley, T. (2011). Personalising learning in secondary schools: Gifted education leading the way. *APEX, 16*(1). Retrieved online from <http://www.giftedchildren.org.nz/apex/>
- Sarouphim, K. M. (2012). How novel is the actiotope model of gifted education. *High Ability Studies, 23*(1), 101-103.
- Scobie-Jennings, E. (2013). An investigation into the identification of Maori gifted and talented students in mainstream schools. *APEX: The New Zealand Journal of Gifted Education, 18*(1).
- Siegle, D., Wilson, H. E., & Little, C. A. (2013). A sample of gifted and talented educators' attitudes about academic acceleration. *Journal of Advanced Academics, 24*(1), 27-51.
- Smith, D. (2007). The rising tide of gifted and talented children in New Zealand. *Commonwealth Education Partnerships, 107-110*.
- Stoop, I., & Harrison, E. (2012). Classification of surveys. In L. Gideon (ed.), *Handbook of Survey Methodology for the Social Sciences* (pp. 7-21). New York, NY: Springer.

- Sue, V. M., & Ritter, L. A. (2012). *Conducting online surveys (2nd ed.)*. Thousand Oaks, CA: Sage.
- Tapper, L. (2012). Conceptions of giftedness in a global, modern world: where are we at in Aotearoa New Zealand 2012? *APEX: The New Zealand Journal of Gifted Education*, 17(1). Retrieved from www.giftedchildren.org.nz/apex.
- Tashakkori, A., & Teddlie, C. (Eds.) (2008). Quality of inferences in mixed methods research: Calling for an integrative framework. In M. M. Bergman (Ed.), *Advances in Mixed Methods Research*. London: Sage.
- Taylor, S. (2001). *Gifted and talented children: A planning guide*. Christchurch, New Zealand: User Friendly Resources.
- Then, K. L., Rankin, J. A., & Ali, E. (2014). Focus group research: What is it and how can it be used? *Canadian Journal of Cardiovascular Nursing*, 24(1), 16-22.
- Tuckman, B. W., & Harper, B. E. (2012). *Conducting education research*. Plymouth, United Kingdom: Rowman & Littlefield Publishers.
- VanTassel-Baska, J. (2004). Metaevaluation findings: A call for gifted program quality. In J. Van Tassel-Baska & A. Feng. *Designing and utilising evaluation for gifted program improvement* (pp. 227-256). Waco: Prufrock Press.
- Wardman, J., & Hattie, J. (2012). Administrators' perceptions of full-year acceleration at high school, *The Australasian Journal of Gifted Education*, 21(1), 32-41.
- Weir, P. (2003). Addressing the needs of gifted Maori and Pacific Island children in New Zealand. *Talented Education*, 21(2), 1-10.
- Winebrenner, S. (2001). *Teaching gifted kids in the regular classroom: Strategies and techniques every teacher can use to meet the academic needs of the gifted and talented*. Minneapolis, MN: Free Spirit Publishing.
- Wolf, N., & Chessor, D. (2011). The affective characteristics of gifted children: Can peer victimisation make a difference? *Australasian Journal of Gifted Education*, 20(1), 38-52.

- Worrell, F. C., & Erwin, J. O. (2011). Best practices in identifying students for gifted and talented education programmes. *Journal of Applied School Psychology, 27*, 319-340.
- Yin, R. K. (2009). *Case study research design and methods (4th ed.)*. Thousand Oaks, CA: Sage.
- Young, M. H., & Balli, S. J. (2014). Gifted and talented education (GATE): Student and parent perspectives. *Gifted Child Today, 37*(4), 236-246.
- Ziegler, A. (2005). The actiotope model of giftedness. In R. J. Sternberg & J. E. Davidson (Eds), *Conceptions of giftedness* (pp.411-436). Cambridge: Cambridge University Press.

APPENDIX

Appendix A: Massey University Human Ethics Committee Approval Letter



MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA

10 January 2015

Angela Warmke
[REDACTED]

Dear Angela

Re: HEC: Southern B Application – 14/48
Identification and provisions for gifted and talented students [REDACTED]
[REDACTED]

Thank you for your letter dated 8 January 2015.

On behalf of the Massey University Human Ethics Committee: Southern B I am pleased to advise you that the ethics of your application are now approved. Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

Prof John O'Neill, Acting Chair
Massey University Human Ethics Committee: Southern B

cc A/Prof Tracy Riley
Institute of Education
PN500

A/Prof Alison Kearney
Institute of Education
PN500

Mrs Roseanne MacGillivray
Institute of Education
PN500

A/Prof Sally Hansen, Director
Institute of Education
PN500

Massey University Human Ethics Committee
Accredited by the Health Research Council

Research Ethics Office, Research and Enterprise

Massey University, Private Bag 11222, Palmerston North 4442, New Zealand T 06 3505573; 06 3505575 F 06 350 5622
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Appendix B: Letter to the Rector



MASSEY UNIVERSITY
INSTITUTE OF EDUCATION
TE KURA O TE MĀTAURANGA

10 February 2015



Dear [REDACTED],

My name is Angela Warmke. I am currently completing my MEdPsych Qualification with Massey University. My two supervisors for this Thesis project are Associate Professors Tracy Riley and Alison Kearney at the Institute of Education, Massey University. I am writing to formally seek your permission to invite staff, students and parents from your school to participate in my research study on identification and provisions for gifted and talented students.

The main aims of this project are to:

- Investigate what the literature (international and national) says about identification and provisions to meet the needs of gifted and talented learners.
- Seek the perspectives of staff, students and parents as to the approaches used at this school to identify and provide for the gifted and talented.
- Analyse existing policies and written documentation supporting the identification and provisions for the gifted and talented at this school (to see how closely it aligns with National Administration Guidelines and the overarching school philosophy/Mission Statement including your four cornerstones: Academic Excellence; Sporting Endeavour; Cultural Participation; and Christian Dimension).
- Seek evidence of efficacy in the identification and provisions used at this school (social validity measures).

Project Procedures

All project procedures will probe how gifted and talented students are identified and their learning needs are met at this school. The project procedures will include:

- Content analysis of any policies and written documentation supporting the identification and provisions for gifted and talented learners at this school.
- Individual Interviews will be carried out with the Principal (and/or members of the Senior Management Team) and the Gifted and Talented Education Coordinator. Each individual interview will take approximately 60-90 minutes and at a time that suits participants involved.
- Focus Group Interviews will be carried out with students (e.g., current and former students involved in the Programme) and a cross-section of staff at this school. Each Focus Group Interview will take approximately 30-60 minutes and scheduled at a time that is negotiated with the school that suits the participants involved.
- Observations of classes working within the Gifted and Talented Programme to provide more in-depth information and insight into provisions in action for students at this school. Students would be participating in their regular activities and the researcher would not interrupt the usual teaching-learning process.
- Online Questionnaires will be administered via Google Forms to staff, students, and parents. Paper copies of these Questionnaires will also be made available for participants who prefer this mode of completion.

Data Management

All precautions will be taken to prevent unauthorised access, use, modification, and disclosure of information gathered from participants. Information and data gathered will only be used for the purpose for which it is collected. The audio files from the recordings of the interviews will be stored on a password protected computer that only the researcher will have access to. The interview transcriptions will be stored separately from any identifying data (including the consent forms) and in a secure manner. Data storage and disposal will be the responsibility of Tracy Riley (Supervisor).

Participant Rights

Researcher practice will adhere to the intentions and principles outlined in the Massey University *Code of Ethical Conduct for Research, Teaching and Evaluations involving Human Participants*.

Participation in this research project is voluntary and based on the understanding of adequate and appropriate information about what your participation will involve. Completion and return of the Consent Form will indicate your willingness to participate. If you decide to participate, you have the right to:

- decline to answer any particular question;
- withdraw from the study at any time;
- ask any questions about the study at any point during participation;
- provide information on the understanding that your name (and the school name) will not be used without your consent;
- be given access to a summary of the project findings when it is concluded.

Anonymity and Confidentiality

Given the unique nature of [REDACTED], please note that it would not be possible to conceal the identity of the school in this project. Every attempt will be made to maintain the anonymity, confidentiality and security of the information and data collected throughout the project, including the presentation of findings.

Researcher and Supervisor Contact Details

If you have any further queries please contact me (and/or my Supervisors) at:

Angela Warmke

[REDACTED]
[REDACTED]

Tracy Riley

Work: (06) 356 9099 Ext 84408
Email: t.L.riley@massey.ac.nz

Alison Kearney

Work: (06) 356 9099 Ext 84416
Email: A.C.Kearney@massey.ac.nz

Committee Approval Statement

"This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 14/48. If you have any concerns about the conduct of this research, please contact Prof John O'Neill, Acting Chair, Massey University Human Ethics Committee: Southern B, telephone (06) 350 5799 x 81090, email humanethicssouthb@massey.ac.nz."

I look forward to your response to this request.

Yours Sincerely,

Angela Warmke

Appendix C: General Information Sheet



MASSEY UNIVERSITY
INSTITUTE OF EDUCATION
TE KURA O TE MĀTAURANGA

Identification and Provisions for Gifted and Talented Students at [REDACTED]

INFORMATION SHEET

Researcher Introduction

My name is Angela Warmke. I am currently completing my MEdPsych Qualification with Massey University. My two supervisors for this project are Associate Professors Tracy Riley and Alison Kearney in the Institute of Education.

Project Description and Invitation

The main aims of this project are to:

- Investigate what the literature (international and national) says about identification and provisions to meet the needs of gifted and talented learners.
- Seek the perspectives of staff, students and parents as to the approaches used at this school to identify and provide for the gifted and talented.
- Analyse existing policies and written documentation supporting the identification and provisions for the gifted and talented at this school (to see how closely it aligns with National Administration Guidelines and the overarching school philosophy/Mission Statement including your four cornerstones: Academic Excellence; Sporting Endeavour; Cultural Participation; and Christian Dimension).
- Seek evidence of efficacy in the identification and provisions used at this school (social validity measures).

Project Procedures

All project procedures will probe how gifted and talented students are identified and their learning needs are met at this school.

- Content analysis of any policies and written documentation supporting the identification and provisions for gifted and talented learners at this school.
- Individual Interviews will be carried out with the Principal (and/or members of the Senior Management Team) and the Gifted & Talented Education Coordinator. Each individual interview will take approximately 60-90 minutes and scheduled at a time that suits participants involved.
- Focus Group Interviews will be carried out with students (e.g., current and former students involved in the Programme) and a cross-section of staff at this school. Each Focus Group Interview will take approximately 30-60 minutes and scheduled at a time that is negotiated with the school that suits the participants involved.
- Observations of classes working within the Gifted and Talented Programme to provide more in-depth information and insight into provisions in action for students at this school. Students would be participating in their regular activities and the researcher would not interrupt the usual teaching-learning process.
- Questionnaires will be administered via Google Forms to staff, students, and parents. Paper copies of these Questionnaires will also be made available for participants who prefer this mode of completion.

Data Management

All precautions will be taken to prevent unauthorised access, use, modification, and disclosure of information gathered from participants. Information and data gathered will only be used for the purpose for which it is collected. The audio files from the recordings of the interviews will be stored on a password protected computer that only the researcher will have access to. The interview transcriptions will be stored separately from any identifying data (including the consent forms) and in a secure manner. Data storage and disposal will be the responsibility of Tracy Riley (Supervisor).

Participant Rights

Researcher practice will adhere to the intentions and principles outlined in the Massey University *Code of Ethical Conduct for Research, Teaching and Evaluations involving Human Participants*.

Participation in this research project is voluntary and based on understanding of adequate and appropriate information about what your participation will involve. Completion and return of the Consent Form will indicate your willingness to participate. If you decide to participate, you have the right to:

- decline to answer any particular question;
- withdraw from the study at any time;
- ask any questions about the study at any point during participation;
- provide information on the understanding that your name will not be used without your consent;
- be given access to a summary of the project findings when it is concluded.

Anonymity and Confidentiality

Given the unique nature of [REDACTED], please note that it would not be possible to hide the identity of the school in this project. Every attempt will be made to maintain the anonymity, confidentiality and security of the information and data collected throughout the project, including the presentation of findings.

Researcher and Supervisor Contact Details

If you have any further queries please contact me (and/or my Supervisors) at:

Angela Warmke

[REDACTED]
[REDACTED]

Tracy Riley

Work: (06) 356 9099 Ext 84408
Email: t.l.riley@massey.ac.nz

Alison Kearney

Work: (06) 356 9099 Ext 84416
Email: A.C.Kearney@massey.ac.nz

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Appendix D: Information Sheet and Questions for the Individual In-Depth Interview



MASSEY UNIVERSITY
INSTITUTE OF EDUCATION
TE KURA O TE MĀTAURANGA

Identification and Provisions for Gifted and Talented Students at [REDACTED]

INFORMATION SHEET FOR IN-DEPTH INTERVIEW

You would have already received an Information Sheet outlining the following: Researcher Introduction; Project Description and Invitation; Project Procedures; Data Management; Participant Rights; Anonymity and Confidentiality; and Researcher and Supervisor Contact Details.

The purpose in this phase of the research is to gather in-depth information about your school's 'journey' to date, future plans, and the enablers and barriers to effective identification and provisions for the gifted and talented students at this school.

As you are the GATE Coordinator/key person of the Senior Management Team at this school, I would like to conduct a semi-structured in-depth interview with you. The interview will be conducted during the school day at a time convenient to you. The interview should last approximately 60-90 minutes. The purpose in the interview is to gain a further understanding of your school's organisational strategies, identification procedures and provisions for gifted and talented students (see Page 2 for the interview questions). During the visit, if feasible, I would like to informally visit and observe classrooms or programmes; and like access to, and when applicable, photocopies of any written documentation, such as policies, action plans, registers and so on for the purpose of document analysis.

An audio recording of the interview will be made and transcribed for analysis. I will make the transcribed interview available to you for checking of accuracy and further comment. All data will be stored in a secure location at Massey University for a period of five years. The findings of this research will only be used for the purpose of submitting a final Education Thesis to Massey University as partial fulfillment for my MEdPsych Qualification.

As a participant, you have the right to:

- Decline to participate;
- Decline to answer any particular questions;
- Withdraw from the study;
- Ask any questions about the study at any time during participation;
- Provide information on the understanding that your name, or that of your school, will not be used;
- Ask for the audio recording to be turned off at any time during the interview.

Researcher and Supervisor Contact Details

If you have any further queries please contact me (and/or my Supervisors) at:

Angela Warmke
[REDACTED]

Tracy Riley
Work: (06) 356 9099 Ext 84408
Email: t.l.riley@massey.ac.nz

Alison Kearney
Work: (06) 356 9099 Ext 84416
Email: A.C.Kearney@massey.ac.nz

Committee Approval Statement

"This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 14/48. If you have any concerns about the conduct of this research, please contact Prof. John O'Neill, Acting Chair, Massey University Human Ethics Committee: Southern B, telephone (06) 350 5799 x 81090, email humanethicssouthb@massey.ac.nz."

IN-DEPTH INTERVIEW QUESTIONS

The interview will begin with an overview of the research, including an explanation of the purpose and procedures for the interview. Participants' rights will be outlined and informed consent gained prior to the start of the interview. My questions specifically relating to the school will be asked at this stage. The opportunity will also be given for further elaboration of the school's procedures, identification and provisions for gifted and talented students.

Questions:

1. Please describe your school's 'journey' by giving a brief historical overview of your Gifted and Talented Programme. What enabled your school to reach this point? What were the barriers (if any) in establishing your school's identification and provisions? How were these barriers overcome? What are your long-term strategic plans for Gifted and Talented Education at this school?
2. Please describe the school-wide organisational strategies (e.g., coordination, committee, policy, action plan, professional development, 'job description' of coordinator, etc) which support the Gifted and Talented Programme in your school.
3. How is *giftedness* and *talent* defined at this school? How was this conceptualised (e.g., steps taken to reach this school definition)?
4. What methods of identification of giftedness and talent are utilised?
5. In terms of identification, what has been most effective/successful? What factors contributed to its effectiveness/success? What has been problematic/unsuccessful? And how have those problems been addressed? And overcome?
6. What approaches to provisions for the gifted and talented are utilised?
7. In terms of provisions, what has been most effective/successful? What factors contributed to its effectiveness/success? What has been problematic/unsuccessful? And how have those problems been addressed? And overcome?
8. How is your School Mission Statement/Philosophy (e.g., Four Cornerstones) incorporated into the Gifted and Talented Programme (e.g., identification and provisions)?
9. Please describe the measures your school has in place to ensure gifted and talented Maori children, and those from other underrepresented groups (e.g., cultural, socioeconomic, with disabilities, underachievers, gender, etc), are identified and provided for appropriately. What measures have been most effective? Have there been barriers, and if so, how have those been addressed and overcome?
10. Please describe how your school facilitates parental and community involvement in Gifted and Talented Education.
11. Are there outside agencies (including other schools) your school works in partnership and if so, in what capacity? Of these, which have proven most beneficial? Why?
12. Please describe how your school evaluates the effectiveness of your Gifted and Talented Programme (including organisational strategies, identification and provisions).
13. What advice would you give to schools at the beginning stages of establishing a Gifted and Talented Programme?
14. Is there anything else that you would like to discuss regarding your school's identification of and provisions for gifted and talented students?

Questions are adapted from Riley, Bevan-Brown, Carroll-Lind, & Kearney (2004) and Riley & Bicknell (2013).

Appendix E: Information Sheet and Questions for the Staff Focus Group Interview



MASSEY UNIVERSITY
INSTITUTE OF EDUCATION
TE KURA O TE MĀTAURANGA

Identification and Provisions for Gifted and Talented Students at [REDACTED]

INFORMATION SHEET – STAFF FOCUS GROUP INTERVIEW

The purpose in this phase of the research is to gather more in-depth information about your school's 'journey' to date, future plans, and the enablers and barriers to effective identification and provisions for gifted and talented students at this school.

As a key member of the teaching staff at your school, I would like to invite you to participate in a Staff Focus Group Interview. The purpose in the Staff Focus Group Interview is to gain a further understanding of your school's organisational strategies, identification procedures and provisions for gifted and talented students. The interview will be conducted at school and take approximately 30-60 minutes. During the focus group interview, the following themes will be explored:

- the school-wide philosophy regarding the education of gifted and talented students;
- the level of school-wide involvement in the organisation and administration of gifted and talented education;
- the promising practices, and enablers and barriers to those, in relation to identification and provisions; and
- the identification of and provisions for potentially overlooked gifted and talented students (e.g., Maori, culturally diverse groups, underachievers, etc).

An audio recording will be made of this Focus Group Interview and transcribed for analysis. Therefore, your participation indicates your consent to be audio taped. Please sign the *Participant Consent Form* and the *Confidentiality Agreement Form* to confirm that you agree to the conditions outlined for the Staff Focus Group Interview. All data will be stored in a secure location at Massey University for a period of five years. The findings of this research will only be used for the purpose of submitting a final Education Thesis to Massey University as partial fulfillment for my MEdPsych Qualification.

As a participant, you have the right to:

- Decline to participate;
- Decline to answer any particular questions;
- Withdraw from the study;
- Ask any questions about the study at any time during participation;
- Provide information on the understanding that your name, or that of your school, will not be used;
- Ask for the audiotape to be turned off at any time during the interview.

Researcher and Supervisor Contact Details

If you have any further queries please contact me (and/or my Supervisors) at:

Angela Warmke
[REDACTED]
[REDACTED]

Tracy Riley

Work: (06) 356 9099 Ext 84408
Email: t.l.riley@massey.ac.nz

Alison Kearney

Work: (06) 356 9099 Ext 84416
Email: A.C.Kearney@massey.ac.nz

Committee Approval Statement

"This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 14/48. If you have any concerns about the conduct of this research, please contact Prof John O'Neill, Acting Chair, Massey University Human Ethics Committee: Southern B, telephone (06) 350 5799 x 81090, email humanethicssouthb@massey.ac.nz."

Staff Focus Group Interview Questions

The interview will begin with an overview of the research, including an explanation of the purpose and procedures for the focus group interview. Participants' rights will be outlined and informed consent gained prior to the start of the interview.

1. What is your school's philosophy towards the identification and education of gifted and talented students?
2. How does your school's philosophy align with or differ from your own perspectives on gifted and talented education?
3. In terms of the organisation and administration of your school's identification and provisions for gifted and talented students, what opportunities have been given for school-wide involvement? (e.g., have staff been directly involved in the formulation and implementation of the school's policy? Has staff had opportunities for professional development? Have staff been involved in consultative decision-making processes regarding identification and provisions?)
4. (a) What are the most promising practices your school has in place for identifying gifted and talented students? In other words, what do you do 'really well'?
(b) What factors have contributed to the development and implementation of these practices?
(c) What are the barriers or difficulties in identifying gifted and talented students? How have, or might, those be overcome?
5. (a) What are the most promising practices your school has in place for meeting the needs of gifted and talented students (e.g., provisions)? In other words, how effective are the school's provisions for gifted and talented students?
(b) What factors have contributed to the development and implementation of these practices?
(c) What are the barriers or difficulties in providing for the needs of gifted and talented students? How have, or might, those be overcome?
(d) How well does your school review the effectiveness of provision for gifted and talented students?
6. Are parents, family, and community members consulted about gifted provisions; involved in decision making relating to these provisions and to their children's participation in them; invited to contribute their expertise; and involved in the evaluation of these provisions?
7. How well does the school leadership support the achievement of gifted and talented students?
8. How inclusive and appropriate are the school's processes for defining and identifying giftedness and talent?
9. How is your School Mission Statement/Philosophy (e.g., Four Cornerstones) incorporated into the Gifted and Talented Programme (e.g., identification and provisions)?
10. Please describe the measures your school has in place to ensure all gifted and talented students, including gifted and talented Maori children and those from other underrepresented groups (e.g., cultural, socioeconomic, with disabilities, underachievers etc), are identified and provided for appropriately. What measures have been most effective? Have there been barriers and if so, how have those been overcome?
11. To what extent does the Gifted and Talented Programme at this school promote positive outcomes for your gifted and talented students?
12. Is there anything else you would like to discuss in relation to your school's identification of and provisions for gifted and talented students?

Focus Group Interview Questions have been adapted from Riley et al. (2004), Gifted and Talented: Meeting Their Needs in New Zealand Schools (2012), and ERO (2008).

Appendix F: Information Sheet and Questions for the Student Focus Group Interview



MASSEY UNIVERSITY
INSTITUTE OF EDUCATION
TE KURA O TE MĀTAURANGA

Identification and Provisions for Gifted and Talented Students at [REDACTED]

INFORMATION SHEET – STUDENT FOCUS GROUP INTERVIEW

My name is Angela Warmke. I am currently completing my MEdPsych Qualification with Massey University. The Rector, [REDACTED], has given me consent to carry out my Thesis project - *Identification and Provisions for Gifted and Talented Students at [REDACTED]*. My two supervisors for this project are Associate Professors Tracy Riley and Alison Kearney in the Institute of Education.

Thank you for agreeing to participate in a Student Focus Group Interview with me on **Tuesday 19 May 2015 at Period 1** in your **School Library**. This Focus Group will take approximately 30-60 minutes of your time. The purpose of this Focus Group Interview is to gain 'your voice' (as a student involved in the Gifted and Talented Programme at [REDACTED]) and a deeper understanding of how gifted and talented students are identified and catered for at this school. Please refer to Page 2 for the Student Focus Group Interview Questions.

The Focus Group Interview will be audio-recorded and transcribed for analysis. Therefore, your participation indicates consent to this. Please sign the *Participant Consent Form* and the *Confidentiality Agreement Form* to confirm that you agree to the conditions outlined for the Student Focus Group Interview. All data will be stored in a secure location at Massey University for a period of five years. The findings of this research will only be used for the purpose of submitting a final Education Thesis to Massey University as partial fulfillment for my MEdPsych Qualification.

As a participant, you have the the right to:

- Decline to participate;
- Decline to answer any particular questions;
- Withdraw from the study;
- Ask any questions about the study at any time during participation;
- Provide information on the understanding that your name, or that of your school, will not be used;
- Ask for the audio recording to be turned off at any time during the interview.

If you have any further queries please contact me (and/or my Supervisors) at:

Angela Warmke

[REDACTED]
[REDACTED]

Tracy Riley

Work: (06) 356 9099 Ext 84408
Email: t.l.riley@massey.ac.nz

Alison Kearney

Work: (06) 356 9099 Ext 84416
Email: A.C.Kearney@massey.ac.nz

Committee Approval Statement

"This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 14/48. If you have any concerns about the conduct of this research, please contact Prof John O'Neill, Acting Chair, Massey University Human Ethics Committee: Southern B, telephone (06) 350 5799 x 81090, email humanethicssouthb@massey.ac.nz."

Student Focus Group Interview Questions

The interview will begin with an overview of the research, including an explanation of the purpose and procedures for the focus group interview. Participants' rights will be outlined and informed consent gained prior to the start of the interview.

1. What does the term 'gifted and talented' mean to you?
2. What does it mean to be 'gifted and talented' at this school?
3. Do you think equal value is placed on the Four Cornerstones (Academic Excellence; Sporting Endeavour; Cultural Participation; and Spiritual Dimension) in the Gifted & Talented Programme? In terms of identification? Provisions?
4. How were you identified for the Gifted & Talented Programme?
5. How are your gifts and talents catered for at this school (e.g., provisions)?
6. How effective are these provisions?
7. What part about the Gifted & Talented Programme do you value the most?
8. Is there anything you would like to be done differently in the identification of gifted and talented students at this school?
9. Is there anything you would like to be done differently in the provisions for gifted and talented students at this school?
10. To what extent has the Gifted & Talented Programme at your school enhance your learning or area of ability?
11. How is your progress monitored and assessed once you start the Gifted & Talented Programme?
12. Is there anything else you would like to share in relation to your school's identification of and provisions for gifted and talented students?

Appendix G: Information Sheet for Parents



MASSEY UNIVERSITY
INSTITUTE OF EDUCATION
TE KURA O TE MĀTAURANGA

Identification and Provisions for Gifted and Talented Students at [REDACTED]

PARENT INFORMATION

Dear Parent/Guardian,

My name is Angela Warmke. I am currently completing my MEdPsych Qualification with Massey University. The Rector, Ken MacLeod, has given me consent to carry out my Thesis project - *Identification and Provisions for Gifted and Talented Students at Lindisfarne College*. My two supervisors for this project are Associate Professors Tracy Riley and Alison Kearney in the Institute of Education.

I am writing to you with the following information as your son is listed on the Register of Gifted and Talented Students at **Lindisfarne College**. To collect information about how gifted and talented students are identified and provided for at this school, I will be carrying out the following this year:

- Class Observations
- Student Focus Group Interviews
- Online Questionnaires

Class Observations

A number of observations will be carried out in classes that fall under the Gifted and Talented Programme at [REDACTED]. For the Class Observations, students will be participating in their usual activities planned for the lessons and the teaching-learning process will not be interrupted at any point during the observations.

Student Focus Group Interview

I will be inviting a number of students on the gifted and talented student register to participate in a Student Focus Group Interview with me this Term. This Focus Group Interview will take approximately 30-60 minutes of your son's time, and carried out at a suitable time negotiated with the School. The purpose of this Interview is to gain the 'student voice' and a deeper understanding of how gifted and talented students at [REDACTED] are identified and provided for.

Prior to the Focus Group Interview, your son will be given an Information Sheet including a brief outline of this project and the Interview Questions. He will also be asked to sign a Consent Form to confirm that he agrees to the conditions outlined for the Focus Group Interview. The Focus Group Interview will be audio-recorded and transcribed for analysis. Hence, your son's participation indicates consent to this.

Online Questionnaire

I will also be inviting you and your son to participate in an online Questionnaire to gather more in-depth information about your perspectives and personal experiences with the identification and provisions for gifted and talented students at [REDACTED]. A link to the Questionnaire will be emailed out to all participants this Term. Each Questionnaire (Parent and Student) should take approximately 20 minutes to complete. Please complete the Parent and Student Questionnaires independently. Your confidentiality and anonymity are assured and it is assumed that filling in the Questionnaire implies your consent to participate. You have the right to decline to answer any questions.

All data collected in this project will be stored in a secure location at Massey University for a period of five years. The findings of this research will only be used for the purpose of submitting a final Education Thesis to Massey University as partial fulfillment for my MEdPsych Qualification.

If you would like further information about my project, please contact either myself and/or my Thesis Supervisors on the numbers and emails below.

Angela Warmke
[REDACTED]
[REDACTED]**Tracy Riley**

Work: (06) 356 9099 Ext 84408

Email: t.L.riley@massey.ac.nz

Alison Kearney

Work: (06) 356 9099 Ext 84416

Email: A.C.Kearney@massey.ac.nz

Kind regards,

Angela Warmke

Appendix H: Participant Consent Form



MASSEY UNIVERSITY
INSTITUTE OF EDUCATION
TE KURA O TE MĀTAURANGA

Identification and Provisions for Gifted and Talented Students at [REDACTED]

PARTICIPANT CONSENT FORM

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

I agree/do not agree to the interview being sound recorded (if applicable).

I wish/do not wish to have my recordings returned to me (if applicable).

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature:	
Full Name (printed):	
Date:	
Email:	
Phone:	

Appendix I: Confidentiality Agreement Form for Focus Group Interviews



MASSEY UNIVERSITY
INSTITUTE OF EDUCATION
TE KURA O TE MĀTAURANGA

Identification and Provisions for Gifted and Talented Students at [REDACTED]

FOCUS GROUP INTERVIEW CONFIDENTIALITY AGREEMENT FORM

I agree to keep confidential all information concerning the project *Identification and Provisions for Gifted and Talented Students at [REDACTED]*.

I will not disclose, retain or copy any information involving the project.

Signature:	
Full Name (printed):	
Date:	

Appendix J: Confidentiality Form for the Transcribers



Identification and Provisions for Gifted and Talented Students at a Boys' Secondary School in New Zealand

TRANSCRIBER'S CONFIDENTIALITY AGREEMENT

I (Full Name - printed) agree to transcribe the audio recordings provided to me.

I agree to keep confidential all the information provided to me.

I will not copy or retain any information (including the audio recordings and transcripts) involving the project.

Signature: _____ **Date:** _____

Appendix K: Staff Questionnaire

My name is Angela Warmke. For my MEdPsych Thesis project, I am conducting research on Identification and Provisions for Gifted and Talented students at [REDACTED]. The purpose of this Questionnaire is to gather in-depth information and individual perspectives from Staff at [REDACTED]. I hope that you will also view this as an opportunity to reflect on your own school's current practices for gifted and talented students.

DIRECTIONS: Please answer these questions in relation to Identification and Provisions for Gifted and Talented students at [REDACTED]. This Questionnaire should take you approximately 20 minutes to complete. Your confidentiality and anonymity are assured and it is assumed that filling in the Questionnaire implies your consent to participate. You have the right to decline to answer any questions. The information you provide will only be utilised for the purposes of this research.

Please contact me if you would like to discuss anything further or if you have any questions either via email [REDACTED] or mobile [REDACTED]. Your responses as a staff member at [REDACTED] is an invaluable component of my project. I thank you in advance for participating in this project by completing the Questionnaire. Please complete and submit the Questionnaire online by Friday 8 May 2015.

COORDINATION/RESPONSIBILITY

Questions 1-2 relate to your school's coordination of gifted and talented education.

1. Does [REDACTED] have a person responsible for gifted and talented education?

- Yes
- No
- Not sure

If Yes, who is that person?

2. Does [REDACTED] have a committee or coordinating team for gifted and talented education?

- Yes
- No
- Not sure

If Yes, please indicate the members (specify names and roles):

DEFINITION

Questions 3-4 relate to the definition of gifted and talented education.

3. What does 'gifted and talented' mean to you?

4. Does [REDACTED] have a school-wide concept or definition of giftedness and talent?

- Yes
- No
- To some extent
- Not sure

If Yes, what is the school-wide concept or definition of gifted and talented students?

IDENTIFICATION AND PROVISIONS

Questions 5-21 relate to Identification and Provisions for gifted and talented students at [REDACTED].

5. Does [REDACTED] use a curriculum or programme model (e.g., Autonomous Learner Model, Enrichment Triad Model, etc) to guide the identification and provisions for gifted and talented students?

- Yes
- No
- To some extent
- Not sure

If Yes, please specify what curriculum or programme model(s) are used to guide the identification and provisions for gifted and talented students.

6. What characteristics do you think are often identifiable (typical characteristics) in gifted and talented students?

7. Has [REDACTED] formally identified gifted and/or talented students in the last 12 months?

- Yes
- No
- To some extent
- Not sure

If Yes, approximately how many students are identified annually?

8. Are you familiar with the identification process used to select students for participation in the Gifted and Talented Programme(s) at [REDACTED]?

- Yes
- No
- To some extent

9. Which statement best describes your perception of the identification process at [REDACTED]. (Select only one statement).

- The process is very consistent and provides for uniform procedures from year level to year level.
- The process is very broad and inclusive and benefits a wide range of students.
- The process is fair, inclusive and appropriate and targets a reasonable number of students for participation in the programme(s).
- The process is too broad and dilutes the effectiveness of the programme(s).

- The process is too narrow and excludes students who should benefit.
- The process is too inconsistent and does not provide for uniform procedures from year level to year level.
- Not Sure
- Other:

10. How well is [redacted] identifying gifted and talented students?

1 2 3 4 5

Poorly Very well

Please provide a comment to support your rating in Question 10.

11. From your perspective, what are the gifted and talented students' needs at [redacted] [redacted]? (Select only one answer per row).

	Low need	Moderate need	High need	Not sure
To be identified	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have opportunities to explore and develop their areas of high ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have choices in terms of topic, process and outcomes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To experience high levels of challenge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have ongoing opportunities for critical, creative and caring (ethical) thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have opportunities for accelerated learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have an individual learning plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have regular opportunities to work with other gifted students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have opportunities to explore the social and emotional aspects of giftedness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have nurturing and responsive environments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To have positive attitudes towards giftedness and learning (e.g., from their parents, Teachers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Are there any other needs for gifted and talented students at [redacted] [redacted]? (Please provide specific details).

13. Are you directly involved in providing for gifted and/or talented students?

- Yes
- No
- To some extent

If Yes, describe your involvement in provisions for gifted and/or talented students. (Please include specific details about your provisions e.g., what is provided, where, when, to whom etc.).

14. In making educational provisions for gifted and/or talented students, does [REDACTED] prefer? *(Select only one answer).*

- Enrichment approaches
- Acceleration approaches
- A combination of enrichment and acceleration approaches
- Not sure
- Other:

15. Does [REDACTED] have classroom-based provisions for gifted and/or talented students?

- Yes
- No
- To some extent
- Not sure

16. Which of the following classroom-based provisions are currently used at [REDACTED]? *(Select all that apply).*

- Ability Grouping
- Learning Centres
- Independent Study
- Curriculum Compacting/Diagnostic-Prescriptive Teaching (e.g., pre-assessment directs teaching decisions)
- Individualised Education Plans (IEPs)
- Consulting Specialist Teacher (working with students)
- Teacher Planning (e.g., plans must demonstrate differentiated options for gifted and talented students)
- Not Sure
- Other:

17. Has [REDACTED] provided school-based programmes for gifted and/or talented students in the last 12 months?

- Yes
- No
- To some extent
- Not sure

If Yes, please specify what school-based programmes are provided at [REDACTED].

18. Does [REDACTED] use external provisions (out of school providers) for gifted and/or talented students?

- Yes
 No
 To some extent
 Not sure

19. Which of the following external provisions (out of school providers) are currently used at [REDACTED]? (Select all that apply).

- Correspondence School
 University Level Study
 School Clusters/Networks
 One-Day-A-Week Programme (e.g., George Parkyn One Day School, Gifted Kids Programme)
 Weekend/Holiday Programmes
 Online Programmes
 Competitions
 Not Sure
 Other:

20. How effective is [REDACTED] provision for gifted and talented students?

- 1 2 3 4 5

 Poor Very effective

Please provide a comment to support your rating in Question 20.

Areas of Giftedness

Questions 21-47 relate to Identification and Provisions in the Areas of Giftedness. [REDACTED] has classified six Areas of Giftedness that are central to the ethos of the school (adapted from Riley et al., 2004). The Areas of Giftedness include: INTELLECTUAL/ACADEMIC - refers to Languages, Social Sciences, Mathematics, Science or Technology. CREATIVITY - refers to general ability to problem-find and problem-solve as well as innovative thinking and productivity. VISUAL/PERFORMING ARTS - refers to Music, Drama, and/or Visual Arts. SOCIAL/LEADERSHIP - refers to students with inter-personal and intra-personal abilities and qualities which enable them to act in leadership roles. CULTURAL KNOWLEDGE/SKILLS - refers to qualities valued by the student's cultural or ethnic group, including exceptional ability in traditional arts and crafts, pride in cultural identity, language ability and service to the culture. PHYSICAL/SPORTING - refers to physical ability and skills as evidenced through Sport or Health and Physical Education Programmes.

21. Please indicate the Areas of Giftedness that are a major focus of identification at [REDACTED]. (Select all that apply) - Please see above for an explanation of each Area of Giftedness.

- Intellectual/Academic
- Creativity
- Visual/Performing Arts
- Social/Leadership
- Cultural Knowledge/Skills
- Physical/Sporting
- Not Sure
- Other:

22. Which Areas of Giftedness have you personally identified students as gifted and/or talented in the last 12 months? (Select all that apply).

- Intellectual/Academic
- Creativity
- Visual/Performing Arts
- Social/Leadership
- Cultural Knowledge/Skills
- Physical/Sporting
- Other:

INTELLECTUAL/ACADEMIC

INTELLECTUAL/ACADEMIC: refers to Languages, Social Sciences, Mathematics, Science or Technology. Please answer Questions 23-26 with the INTELLECTUAL/ACADEMIC Area of Giftedness specifically in mind.

23. Indicate the Year level(s) at which students were formally identified in the Area of INTELLECTUAL/ACADEMIC in the last 12 months. (Select all that apply).

- Year 7-8 (Intermediate School)
- Year 9-10 (Junior School)
- Year 11-13 (Senior School)
- Across the whole school
- None
- Not sure

24. Indicate how often each method of identification is used. (*Select only one answer per row*).

	Always	Sometimes	Rarely	Never	Not sure
Teacher Observation/Nomination	<input type="radio"/>				
Teacher Rating Scales/Checklist	<input type="radio"/>				
Teacher Discussions/Staff Meetings	<input type="radio"/>				
Achievement/Standardised Tests (e.g., PAT, MidYIS)	<input type="radio"/>				
IQ Tests	<input type="radio"/>				
Teacher-made Tests	<input type="radio"/>				
Portfolios	<input type="radio"/>				
Auditions/Performances	<input type="radio"/>				
Parent Nomination	<input type="radio"/>				
Self-Nomination	<input type="radio"/>				
Peer Nomination	<input type="radio"/>				
Whānau Nomination	<input type="radio"/>				

25. Indicate the Year level(s) at which students received provisions in the Area of INTELLECTUAL/ACADEMIC in the last 12 months. (*Select all that apply*).

- Year 7-8 (Intermediate School)
- Year 9-10 (Junior School)
- Year 11-13 (Senior School)
- Across the whole school
- None
- Not sure

26. Indicate the provision(s) used in the last 12 months. (*Select all that apply*).

- Cross-age Grouping
- Withdrawal Group
- Cluster Grouping (e.g., class placement)
- Acceleration or Early Entry
- Concurrent/Dual Enrolment
- Full-time Special Class
- Mentorships
- Competitions
- Clubs or Electives
- Virtual Instruction/Web-based Learning
- External Examinations (e.g., University-Level Papers, Cambridge, International Baccalaureate)

- Outside 'Expert' (e.g., Parent, community)
- Not sure
- Other:

CREATIVITY

CREATIVITY: refers to general ability to problem-find and problem-solve as well as innovative thinking and productivity. Please answer Questions 28-31 with the CREATIVITY Area of Giftedness specifically in mind.

27. Indicate the Year level(s) at which students were formally identified as gifted and/or talented in the Area of CREATIVITY in the last 12 months. (Select all that apply).

- Year 7-8 (Intermediate School)
- Year 9-10 (Junior School)
- Year 11-13 (Senior School)
- Across the whole school
- None
- Not sure

28. Indicate how often each method of identification is used. (Select only one answer per row).

	Always	Sometimes	Rarely	Never	Not sure
Teacher Observation/Nomination	<input type="radio"/>				
Teacher Rating Scales/Checklist	<input type="radio"/>				
Teacher Discussions/Staff Meetings	<input type="radio"/>				
Achievement/Standardised Tests (e.g., PATs, MidYIS)	<input type="radio"/>				
IQ Tests	<input type="radio"/>				
Teacher-made Tests	<input type="radio"/>				
Portfolios	<input type="radio"/>				
Auditions/Performances	<input type="radio"/>				
Parent Nomination	<input type="radio"/>				
Self-Nomination	<input type="radio"/>				
Peer Nomination	<input type="radio"/>				
Whānau Nomination	<input type="radio"/>				

29. Indicate the Year level(s) at which students received provisions in the Area of CREATIVITY in the last 12 months. (Select all that apply).

- Year 7-8 (Intermediate School)
- Year 9-10 (Junior School)
- Year 11-13 (Senior School)
- Across the whole school
- None
- Not sure

31. Indicate the provision(s) used in the last 12 months. (Select all that apply).

- Cross-age Grouping
- Withdrawal Group
- Cluster Grouping (e.g., class placement)
- Acceleration or Early Entry
- Concurrent/Dual Enrolment
- Full-time Special Class
- Mentorships
- Competitions
- Clubs or Electives
- Virtual Instruction/Web-based Learning
- External Examinations (e.g., University-Level Papers, Cambridge, International Baccalaureate)
- Outside 'Expert' (e.g., Parent, community)
- Not sure
- Other:

VISUAL/PERFORMING ARTS

Visual/Performing Arts: refers to Music, Drama, and/or Visual Arts. Please answer Questions 31-34 with the VISUAL/PERFORMING ARTS Area of Giftedness specifically in mind.

31. Indicate the Year level(s) at which students were formally identified as gifted and/or talented in the Area of VISUAL/PERFORMING ARTS in the last 12 months. (Select all that apply).

- Year 7-8 (Intermediate School)
- Year 9-10 (Junior School)
- Year 11-13 (Senior School)
- Across the whole school
- None
- Not sure

32. Indicate how often each method of identification is used. (Select only one answer per row).

	Always	Sometimes	Rarely	Never	Not sure
Teacher Observation/Nomination	<input type="radio"/>				
Teacher Rating Scales/Checklist	<input type="radio"/>				
Teacher Discussions/Staff Meetings	<input type="radio"/>				
Achievement/Standardised Tests (e.g., PATs, MidYIS)	<input type="radio"/>				
IQ Tests	<input type="radio"/>				
Teacher-made Tests	<input type="radio"/>				
Portfolios	<input type="radio"/>				
Auditions/Performances	<input type="radio"/>				
Parent Nomination	<input type="radio"/>				
Self-Nomination	<input type="radio"/>				
Peer Nomination	<input type="radio"/>				
Whānau Nomination	<input type="radio"/>				

33. Indicate the Year level(s) at which students received provisions in the Area of VISUAL/PERFORMING ARTS in the last 12 months. (Select all that apply).

- Year 7-8 (Intermediate School)
- Year 9-10 (Junior School)
- Year 11-13 (Senior School)
- Across the whole school
- None
- Not sure

34. Indicate the provision(s) used in the last 12 months. (Select all that apply).

- Cross-age Grouping
- Withdrawal Group
- Cluster Grouping (e.g., class placement)
- Acceleration or Early Entry
- Concurrent/Dual Enrolment
- Full-time Special Class
- Mentorships
- Competitions
- Clubs or Electives
- Virtual Instruction/Web-based Learning
- External Examinations (e.g., University-Level Papers, Cambridge, International Baccalaureate)

- Outside 'Expert' (e.g., Parent, community)
- Not sure
- Other:

SOCIAL/LEADERSHIP

Social/Leadership: refers to inter-personal and intra-personal abilities and qualities which enable students to act in leadership roles. Please answer Questions 35-38 with the SOCIAL/LEADERSHIP Area of Giftedness specifically in mind.

35. Indicate the Year level(s) at which students were formally identified as gifted and/or talented in the Area of SOCIAL/LEADERSHIP in the last 12 months. (Select all that apply).

- Year 7-8 (Intermediate School)
- Year 9-10 (Junior School)
- Year 11-13 (Senior School)
- Across the whole school
- None
- Not sure

36. Indicate how often each method of identification is used. (Select only one answer per row).

	Always	Sometimes	Rarely	Never	Not sure
Teacher Observation/Nomination	<input type="radio"/>				
Teacher Rating Scales/Checklist	<input type="radio"/>				
Teacher Discussions/Staff Meetings	<input type="radio"/>				
Achievement/Standardised Tests (e.g., PATs, MidYIS)	<input type="radio"/>				
IQ Tests	<input type="radio"/>				
Teacher-made Tests	<input type="radio"/>				
Portfolios	<input type="radio"/>				
Auditions/Performances	<input type="radio"/>				
Parent Nomination	<input type="radio"/>				
Self-Nomination	<input type="radio"/>				
Peer Nomination	<input type="radio"/>				
Whānau Nomination	<input type="radio"/>				

37. Indicate the Year level(s) at which students received provisions in the Area of SOCIAL/LEADERSHIP in the last 12 months. (Select all that apply).

- Year 7-8 (Intermediate School)
- Year 9-10 (Junior School)
- Year 11-13 (Senior School)
- Across the whole school
- None
- Not sure

38. Indicate the provision(s) used in the last 12 months. (Select all that apply).

- Cross-age Grouping
- Withdrawal Group
- Cluster Grouping (e.g., class placement)
- Acceleration or Early Entry
- Concurrent/Dual Enrolment
- Full-time Special Class
- Mentorships
- Competitions
- Clubs or Electives
- Virtual Instruction/Web-based Learning
- External Examinations (e.g., University-Level Papers, Cambridge, International Baccalaureate)
- Outside 'Expert' (e.g., Parent, community)
- Not sure
- Other:

CULTURAL KNOWLEDGE/SKILLS

Cultural Knowledge/Skills: refers to qualities valued by the students' cultural or ethnic group, including exceptional ability in traditional arts and crafts, pride in cultural identity, language ability and service to the culture. Please answer Questions 39-42 with the CULTURAL KNOWLEDGE/SKILLS Area of Giftedness specifically in mind.

39. Indicate the Year level(s) at which students were formally identified as gifted and/or talented in the Area of CULTURAL KNOWLEDGE/SKILLS in the last 12 months. (Select all that apply).

- Year 7-8 (Intermediate School)
- Year 9-10 (Junior School)
- Year 11-13 (Senior School)
- Across the whole school
- None

Not sure

40. Indicate how often each method of identification is used. (Select only one answer per row).

	Always	Sometimes	Rarely	Never	Not sure
Teacher Observation/Nomination	<input type="radio"/>				
Teacher Rating Scales/Checklist	<input type="radio"/>				
Teacher Discussions/Staff Meetings	<input type="radio"/>				
Achievement/Standardised Tests (e.g., PATs, MidYIS)	<input type="radio"/>				
IQ Tests	<input type="radio"/>				
Teacher-made Tests	<input type="radio"/>				
Portfolios	<input type="radio"/>				
Auditions/Performances	<input type="radio"/>				
Parent Nomination	<input type="radio"/>				
Self-Nomination	<input type="radio"/>				
Peer Nomination	<input type="radio"/>				
Whānau Nomination	<input type="radio"/>				

41. Indicate the Year level(s) at which students received provisions in the Area of CULTURAL KNOWLEDGE/SKILLS in the last 12 months. (Select all that apply).

- Year 7-8 (Intermediate School)
- Year 9-10 (Junior School)
- Year 11-13 (Senior School)
- Across the whole school
- None
- Not sure

42. Indicate the provision(s) used in the last 12 months. (Select all that apply).

- Cross-age Grouping
- Withdrawal Group
- Cluster Grouping (e.g., class placement)
- Acceleration or Early Entry
- Concurrent/Dual Enrolment
- Full-time Special Class
- Mentorships
- Competitions
- Clubs or Electives

- Virtual Instruction/Web-based Learning
- External Examinations (e.g., University-Level Papers, Cambridge, International Baccalaureate)
- Outside 'Expert' (e.g., Parent, community)
- Not sure
- Other:

PHYSICAL/SPORTING

Physical/Sporting: refers to physical ability and skills as evidenced through Sport or Health and Physical Education Programmes. Please answer Questions 43-46 with the PHYSICAL/SPORTING Area of Giftedness specifically in mind.

43. Indicate the Year level(s) at which students were formally identified as gifted and/or talented in the Area of PHYSICAL/SPORTING in the last 12 months. *(Select all that apply).*

- Year 7-8 (Intermediate School)
- Year 9-10 (Junior School)
- Year 11-13 (Senior School)
- Across the whole school
- None
- Not sure

44. Indicate how often each method of identification is used. *(Select only one answer per row).*

	Always	Sometimes	Rarely	Never	Not sure
Teacher Observation/Nomination	<input type="radio"/>				
Teacher Rating Scales/Checklist	<input type="radio"/>				
Teacher Discussions/Staff Meetings	<input type="radio"/>				
Achievement/Standardised Tests (e.g., PATs, MidYIS)	<input type="radio"/>				
IQ Tests	<input type="radio"/>				
Teacher-made Tests	<input type="radio"/>				
Portfolios	<input type="radio"/>				
Auditions/Performances	<input type="radio"/>				
Parent Nomination	<input type="radio"/>				
Self-Nomination	<input type="radio"/>				
Peer Nomination	<input type="radio"/>				
Whānau Nomination	<input type="radio"/>				

45. Indicate the Year level(s) at which students received provisions in the Area of PHYSICAL/SPORTING in the last 12 months. (Select all that apply).

- Year 7-8 (Intermediate School)
- Year 9-10 (Junior School)
- Year 11-13 (Senior School)
- Across the whole school
- None
- Not sure

46. Indicate the provision(s) used in the last 12 months. (Select all that apply).

- Cross-age Grouping
- Withdrawal Group
- Cluster Grouping (e.g., class placement)
- Acceleration or Early Entry
- Concurrent/Dual Enrolment
- Full-time Special Class
- Mentorships
- Competitions
- Clubs or Electives
- Virtual Instruction/Web-based Learning
- External Examinations (e.g., University-Level Papers, Cambridge, International Baccalaureate)
- Outside 'Expert' (e.g., Parent, community)
- Not sure
- Other:

47. Are there any other comments you would like to make regarding [REDACTED] identification and provisions for gifted and talented students?

Please use the space below for your comments.

WRITTEN POLICIES AND PROCEDURES

Questions 48-50 relate to policies and procedures for gifted and talented education. Please answer the questions in relation to policies and procedures at [REDACTED].

48. Indicate the written policies and procedures at [REDACTED] that specifically address gifted and talented students. (Select only one answer per row).

	Yes	No	Currently being developed	Not sure
Gifted & Talented Policy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Special Needs Policy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Equity Policy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning Support Policy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implementation Plan for Gifted and Talented Students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Procedures Booklet for Gifted and Talented Students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Action Plan for Gifted and Talented Students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Curriculum Delivery Documents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

49. Within [redacted] written policies and procedures, which of the following components are addressed? (Select all that apply).

- Rationale for Gifted and Talented Education
- Goals or Purposes for Gifted and Talented Education
- School-Based Definition of Gifted and Talented Students
- Identification Practices for Gifted and Talented Students
- Programming Options for Gifted and Talented Students
- Curriculum or Programme Model for Gifted and Talented Education
- Professional Development in Gifted and Talented Education
- Funding for Gifted and Talented Education
- Monitoring and Evaluation of Gifted and Talented Education
- Register of Identified Gifted and Talented Students
- Not sure
- Other:

50. Do you have any other comments you would like to make regarding [redacted] policies and procedures for gifted and talented education?

Please use the space below for your comments.

FOUR CORNERSTONES

A balanced education in a Christian setting emphasising excellence is reflected in the mission statement and special character four 'Cornerstones' of [redacted]: Academic Excellence; Sporting Endeavour; Cultural Participation; and Christian Dimension.

Please answer Questions 51-68 with the Four Cornerstones in mind.

51. Does [redacted] identification methods for gifted and talented students place equal emphasis on all Four Cornerstones?

- Yes
- No
- To some extent
- Not sure
- Other:

Please provide comments in relation to your answer in Question 51.

52. Does [redacted] provisions for gifted and talented students place equal emphasis on all Four Cornerstones?

- Yes
- No
- To some extent
- Not sure
- Other:

Please provide comments in relation to your answer in Question 52.

Academic Excellence

Please answer Questions 53-56 with the ACADEMIC EXCELLENCE cornerstone specifically in mind.

53. How well does [redacted] identify gifted and/or talented students in relation to the ACADEMIC EXCELLENCE cornerstone?

1 2 3 4 5

Not identified at all Very well

54. Please provide a specific example of how gifted and/or talented students are identified in relation to the ACADEMIC EXCELLENCE cornerstone.

55. How well does [redacted] provide for gifted and/or talented students in relation to the ACADEMIC EXCELLENCE cornerstone?

1 2 3 4 5

Not provided for at all Very well

56. Please provide a specific example of provision for gifted and/or talented students in relation to the ACADEMIC EXCELLENCE cornerstone.

Sporting Endeavour

Please answer Questions 57-60 with the SPORTING ENDEAVOUR cornerstone specifically in mind.

57. How well does [redacted] identify gifted and/or talented students in relation to the SPORTING ENDEAVOUR cornerstone?

1 2 3 4 5

Not identified at all Very well

58. Please provide a specific example of how gifted and/or talented students are identified in relation to the SPORTING ENDEAVOUR cornerstone.

59. How well does [redacted] provide for gifted and/or talented students in relation to the SPORTING ENDEAVOUR cornerstone?

1 2 3 4 5

Not provided for at all Very well

60. Please provide a specific example of provision for gifted and/or talented students in relation to the SPORTING ENDEAVOUR cornerstone.

Cultural Participation

Please answer Questions 61-64 with the CULTURAL PARTICIPATION cornerstone specifically in mind.

61. How well does [redacted] identify gifted and/or talented students in relation to the CULTURAL PARTICIPATION cornerstone?

1 2 3 4 5

Not identified at all Very well

62. Please provide a specific example of how gifted and/or talented students are identified in relation to the CULTURAL PARTICIPATION cornerstone.

63. How well does [redacted] provide for gifted and/or talented students in relation to the CULTURAL PARTICIPATION cornerstone?

1 2 3 4 5

Not provided for at all Very well

64. Please provide a specific example of provision for gifted and/or talented students in relation to the CULTURAL PARTICIPATION cornerstone.

Christian Dimension

Please answer Questions 65-68 with the CHRISTIAN DIMENSION cornerstone specifically in mind.

65. How well does [redacted] identify gifted and/or talented students in relation to the CHRISTIAN DIMENSION cornerstone?

1 2 3 4 5

Not identified at all Very well

66. Please provide a specific example of how gifted and/or talented students are identified in relation to the CHRISTIAN DIMENSION cornerstone.

67. How well does [redacted] provide for gifted and/or talented students in relation to the CHRISTIAN DIMENSION cornerstone?

1 2 3 4 5

Not provided for at all Very well

68. Please provide a specific example of provision for gifted and/or talented students in relation to the CHRISTIAN DIMENSION cornerstone.

Final Thoughts

69. How well does the Gifted and Talented Programme promote positive outcomes for gifted and talented students at [redacted]?

1 2 3 4 5

Poorly Very well

Please provide a comment to support your rating in Question 69.

70. How well does the Leadership/Senior Management Team support the achievement of gifted and talented students at [redacted]?

1 2 3 4 5

Poorly Very well

Please provide a comment to support your rating in Question 70.

71. How well do you (as a staff member) support the achievement of gifted and talented students at [redacted]?

1 2 3 4 5

Poorly Very well

Please provide a comment to support your rating in Question 71.

72. What is the biggest success that [REDACTED] has had in educating gifted and talented students?

73. What do you think is the biggest challenge in educating gifted and talented students at [REDACTED]?

74. Any additional comments?

THANK YOU

You are now at the end of the Staff Questionnaire. Thank you for your time and responses provided. Your participation in this research project is greatly appreciated. Please remember to click on SUBMIT (below) before you leave this page.

Appendix L: Student Questionnaire

My name is Angela Warmke. For my MEdPsych Thesis Project, I am conducting research on Identification and Provisions for Gifted and Talented students at [REDACTED]. The purpose of this Student Questionnaire is to gather in-depth information and individual perspectives from students at [REDACTED].

DIRECTIONS: Please answer the questions in relation to the Gifted and Talented Programme at [REDACTED]. This Questionnaire should take no more than 20 minutes to complete. Your confidentiality and anonymity are assured and it is assumed that filling in the Questionnaire implies your consent to participate. You have the right to decline to answer any questions. The information you provide will only be utilised for the purposes of this research.

Please contact me via email [REDACTED] if you would like to discuss anything further or if you have any questions. Your responses as a student at [REDACTED] is an invaluable component of my project. I thank you in advance for participating in my project by completing this Student Questionnaire. Please complete and SUBMIT this Student Questionnaire online by FRIDAY 18 SEPTEMBER 2015.

1. What Year level are you currently in at school?

2. What Year level(s) were you involved in the Gifted and Talented Programme at your school (including this year)? (Tick all that apply - e.g., acceleration in any subject/area at any Year level; Year 9/10 Withdrawal Programmes; Mentoring; Year 13 Philosophy Class).

- Year 7
- Year 8
- Year 9
- Year 10
- Year 11
- Year 12
- Year 13
- All of the above
- Not sure

3. I know what it means to be gifted and talented.

(Rate how true this statement is to you)

1 2 3 4 5

Not really Yes!

4. What does 'gifted and talented' mean to you?

5. What does 'gifted and talented' mean at your school?

6. I know what my strengths are and how to make the most of them.

(Rate how true this statement is to you)

1 2 3 4 5

Not really Yes!

7. What are your strengths, talents, or abilities?

8. What are your interests?

9. What do you consider your main gift or talent?

10. Rate your ABILITY *(e.g., processing information, integrating experiences, and abstract thinking; the capacity to acquire knowledge, perform in an activity).*

1 2 3 4 5

Extremely low Extremely high

11. Rate your CREATIVITY *(e.g., fluency, flexibility, and originality of thought; an openness to experience; sensitivity to stimulations; and a willingness to take risks).*

1 2 3 4 5

Extremely low Extremely high

12. Rate your TASK COMMITMENT *(e.g., perseverance, endurance, hard work, but also self-confidence, perceptiveness and a special fascination with a special subject).*

1 2 3 4 5

Extremely low Extremely high

13. How were you identified for the Gifted and Talented Programme at your school? *(e.g., acceleration in any subject/area at any Year level; Year 9/10 Withdrawal Programmes; Mentoring; Year 13 Philosophy Class).*

14. What area(s) of ability were you identified as gifted and/or talented?

(Tick all that apply)

- Intellectual/Academic
- Creativity
- Visual/Performing Arts (including Music, Dance and Drama)
- Social/Leadership
- Cultural Empathy or Cultural Knowledge/Skills
- Physical/Sporting
- Not sure
- Other:

15. What information did you receive from your school about the Gifted and Talented Programme?

16. What additional information (if any) would you like to receive about the Gifted and Talented Programme?

17. How do you think gifted and/or talented students should be identified?

18. What do you consider are the key traits or identifying characteristics of a gifted and/or talented student?

19. How do the Teachers cater to your learning needs at this school?

20. Do you feel confident talking to your Teachers about the level of work and support you need? (Please elaborate on your given answer).

21. Have you experienced any challenges of being gifted and/or talented? (Please elaborate on your given answer).

22. Common Gripes of Gifted Teenagers are shown below:

(Tick all the following statements that apply to you).

- The work we do at school is too easy, and it's boring.
- Parents (teachers, friends) expect us to be perfect, to "do our best" ALL the time.
- Friends who really understand us are few and far between.
- Lots of schoolwork is irrelevant.
- Classmates often tease us about being smart.
- We feel overwhelmed by the number of things we can do in life.
- We feel too different and too alienated.
- We worry a lot about world problems and feel helpless to do anything about them.

23. What is the best thing about the Gifted and Talented Programme at your school? (Please give specific details).

24. How highly do you value (rate) the Gifted and Talented Programme at your school?

1	2	3	4	5	
					
Do not value at all	<input type="radio"/> Highly value				

25. Have you benefited from acceleration (e.g., in NCEA subjects)? (Please elaborate on your given answer).

26. Are you accelerated in the right subjects (including the right number of subjects)? (Please elaborate on your given answer).

27. Would you have chosen yourself to be accelerated (e.g., in NCEA subjects)? (Please elaborate on your given answer).

28. What changes (if any) would you make to how gifted and talented students are identified at [REDACTED]?

29. What changes (if any) would you make to how gifted and talented students are catered/provided for at [REDACTED]?

30. What advice would you give Teachers who have gifted and talented students in their class?

31. Any additional comments?

THANK YOU

You are now at the end of the Student Questionnaire. Thank you for your time and responses provided. Your participation in this research project is greatly appreciated. Please remember to click on SUBMIT before you leave this page.

Appendix M: Parent Questionnaire

My name is Angela Warmke. For my MEdPsych Thesis Project, I am conducting research on Identification and Provisions for Gifted and Talented Students at [REDACTED]. The purpose of this Questionnaire is to gather in-depth information and perspectives from you (as a Parent) about Gifted and Talented Education at this School. You have received this email as your son's name has been supplied by the School.

DIRECTIONS: Please answer the questions in relation to your son's experience at this School (e.g., his involvement in the Withdrawal Programmes; acceleration/enrichment in any subject/area at any Year level; Mentoring; Year 13 Philosophy Class). If you have more than one son that has been involved in Gifted and Talented Education at this School, please complete this Questionnaire with one son in mind. This Questionnaire should take no more than 20 minutes to complete. Your confidentiality and anonymity are assured and it is assumed that filling in the Questionnaire implies your consent to participate. You have the right to decline to answer any questions. The information you provide will only be utilised for the purposes of this research.

I have also invited your sons via Schoology to complete the Student Questionnaire for this research. Please contact me via email [REDACTED] if you would like to discuss anything further or if you have any questions. Your responses as a parent at [REDACTED] is an invaluable component of my project. Please click on the link below, complete and SUBMIT this Parent Questionnaire online by Friday 2 October 2015.

1. What Year level is your son currently in at school?

2. What Year level(s) was your son involved in the Gifted and Talented Programme at [REDACTED] (including this year)? (Tick all that apply).

- Year 7
- Year 8
- Year 9
- Year 10
- Year 11
- Year 12
- Year 13
- All of the above
- Not sure

3. What does 'gifted and talented' mean to you?

4. What does 'gifted and talented' mean at [REDACTED]?

5. Who is the Gifted and Talented Education/Programme Coordinator at this school?

(Please specify name)

6. Do you feel well-informed about the Gifted and Talented Programme at [REDACTED] [REDACTED]?

- Yes
- No
- To some extent

7. What information did you receive about the Gifted and Talented Programme?

8. What additional information (if any) would you like to receive about the Gifted and Talented Programme?

9. What do you consider are the key traits or identifying characteristics of a gifted and/or talented student?

10. How do you think gifted and/or talented students should be identified?

11. Do you know how your son was identified as gifted and/or talented?

(If Yes, please answer Question 12. Otherwise, skip to Question 13).

- Yes
- No
- To some extent

12. Please specify how your son was identified *(e.g., identification methods used).*

13. What area(s) of ability was your son identified as gifted and/or talented? *(Tick all that apply).*

- Academic
- Creativity
- Visual/Performing Arts (including Music, Dance and Drama)
- Social/Leadership
- Cultural Empathy
- Sporting
- Not sure
- Other:

14. What are your son's strengths, talents, or abilities?

15. What are your son's interests?

16. What do you consider is your son's main gift or talent?

17. Rate your son's ABILITY (e.g., processing information, integrating experiences, and abstract thinking; the capacity to acquire knowledge, perform in an activity).

1 2 3 4 5

Extremely low Extremely high

18. Rate your son's CREATIVITY (e.g., fluency, flexibility, and originality of thought; an openness to experience; sensitivity to stimulations; and a willingness to take risks).

1 2 3 4 5

Extremely low Extremely high

19. Rate your son's TASK COMMITMENT (e.g., perseverance, endurance, hard work, but also self-confidence, perceptiveness and a special fascination with a special subject).

1 2 3 4 5

Extremely low Extremely high

20. Do you think equal emphasis is placed on all Four Cornerstones of [REDACTED] in identifying gifted and talented students? (Four Cornerstones: Academic Excellence; Sporting Endeavour; Cultural Participation; and Spiritual Dimension).

- Yes
- No
- To some extent
- Not sure

21. Please provide further comments to your answer for Question 20 with reference to the Four Cornerstones and Identification of gifted and talented students.

22. Do you know how the needs of gifted and talented students are met at this school (e.g., provisions available to students)?

(If Yes, please answer Question 23. Otherwise, skip to Question 24).

- Yes
- No
- To some extent

23. Please specify how the needs of gifted and talented students are met at this school.

24. How are your son's specific gifts and/or talents met at this school?

(e.g., the provisions he has received).

25. What is the area(s) of focus for the gifted and talented provisions for your son?

(Please tick all the boxes that are relevant for your son).

- Academic
- Creativity
- Visual/Performing Arts (including Music, Dance, or Drama)
- Social/Leadership
- Cultural Empathy
- Sporting
- Not sure
- Other:

26. Aside from the Gifted and Talented Programme, has your son received any additional enrichment for his gifts and/or talents (at school or outside agency)?

(If Yes, please answer Question 27. Otherwise, skip to Question 28).

- Yes
- No

27. Please provide specific details about the additional enrichment your son has received.

28. Do you think equal emphasis is placed on all Four Cornerstones of [REDACTED] in providing for gifted and talented students? (Four Cornerstones: Academic Excellence; Sporting Endeavour; Cultural Participation; and Spiritual Dimension).

- Yes
- No
- To some extent
- Not sure

29. Please provide further comments to your answer for Question 28 with reference to the Four Cornerstones and Provisions for gifted and talented students.

30. Has your son experienced any challenges of being gifted and/or talented?

(Please give specific details).

31. What is your son's most significant achievement at [REDACTED]?

(Please give specific details).

33. How highly do you value the Gifted and Talented Programme at [REDACTED]?

1 2 3 4 5

Do not value at all Highly value

34. Did your son benefit from acceleration (e.g., in NCEA subjects)?

(Please elaborate on your given answer).

35. Would you support acceleration for your son again (e.g., in NCEA subjects), knowing what you know now? (Please elaborate on your given answer).

36. What is the best thing about the Gifted and Talented Programme at this school?

37. What changes (if any) would you make to how gifted and talented students are identified at [REDACTED]?

38. What changes (if any) would you make to how gifted and talented students are provided for at [REDACTED]?

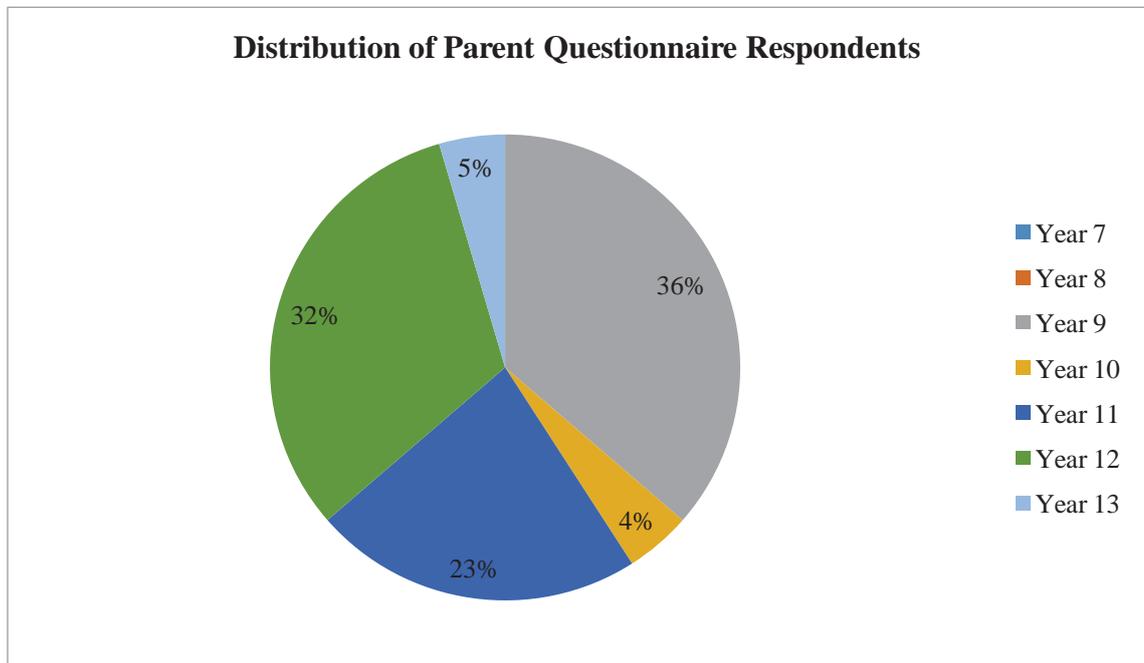
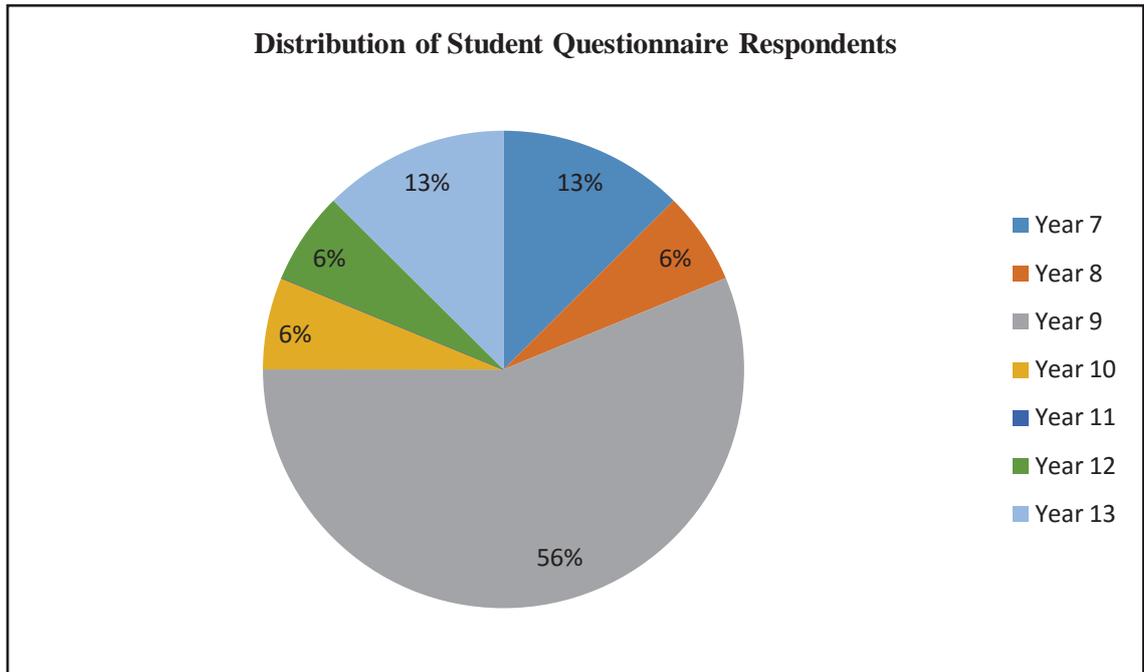
39. What advice would you give Teachers who have gifted and talented students (like you son) in their class?

40. Any additional comments?

THANK YOU

You are now at the end of the Parent Questionnaire. Thank you for your time and responses provided. NOTE: If you have more than one son involved in Gifted and Talented Education at this School, please complete this Questionnaire again from the start using the same link you received via email. Please remember to click on SUBMIT before you leave this page.

Appendix N: Distribution of Student and Parent Questionnaire Respondents



Appendix O: Summary of school documents and student data utilised in this study

Policy/Implementation/Practice Documents	Student Data/Results
<p>Examining teacher beliefs concerning the education of gifted and talented learners collated by University Adviser to Schools (08.10.07)</p> <p>Extension Programme Profile Form</p> <p>Extension Programme Evaluation Year 9 & 10 Forms</p> <p>GATE Committee Meeting Minutes (dated 18.09.07 through to 20.06.14)</p> <p>Gifted and Talented Extension Programme (Year 9 & 10) Scheme of Work (2008 – 2013)</p> <p>Gifted and Talented Policy Document (2007 – 2012)</p> <p>Gifted and Talented Programme Articles for the School Newsletter (2008 – 2013)</p> <p>Gifted and Talented Programme: Brochure for Parents</p> <p>Gifted and Talented Programme Review (2008 – 2013)</p> <p>Identification Form (2009 – 2014)</p> <p>Letter to Parents of boys identified in the 'Academic' area (dated 14.07.14)</p> <p>Power-point Presentation Slides to the Board of Trustees and Gifted and Talented Report to the Board (2010)</p> <p>Register of Gifted and Talented Students (2008 – 2015)</p> <p>School Review and Action Plan (2008 – 2009)</p>	<p>Extension Programme Analysis of Survey Responses (2008 – 2011)</p> <p>Grade Point Average data (2009 – 2014)</p> <p>MidYIS Data (2011-2014)</p> <p>National Certificate of Educational Achievement Overall Result Comparison data for Year 12 and 13 (2014)</p> <p>School Lists (2008 – 2015)</p>

Additional sources of publically available information also utilised in this research included: School Website; School Prospectus; Rector's Newsletters; and School ERO Reports (2008; 2014).

Appendix P: Accelerate Student Pathway

