HOW DO INTERPROFESSIONAL PRACTICE TEAMS WORK TOGETHER TO IDENTIFY AND PROVIDE FOR GIFTED STUDENTS WITH MULTIPLE EXCEPTIONALITIES?

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ABSTRACT

Whilst there is some international research regarding multidisciplinary collaboration as a means to identify and meet the needs of gifted learners with multiple exceptionalities, there is little New Zealand based information, much less research, on this practice.

This multiple case study research explored how gifted learners with multiple exceptionalities are supported in New Zealand by interprofessional (IPP) teams of teachers, special needs coordinators, gifted and talented coordinators, educational psychologists, school counsellors, resource teachers and others. The purpose of the study was to explore experiences and understandings around how IPP teams work against core competencies of interprofessional practice. These are shared values, roles and responsibilities, communication, and teamwork.

Key findings of this study were that the interprofessional practice team identity is still in its infancy, with core competencies not fully developed. Whilst there were shared values and a willingness towards recognising inclusive practices for gifted learners with multiple exceptionalities, these shared values were hampered by limited knowledge and expertise across the IPP team. Limited understandings of teamwork processes, and limited recognition of the importance of communication within the IPP team were common themes. Parents were seldom considered, and students were never considered part of the IPP team, which by its very name excludes parent and student voice.

Whilst not evaluative, these findings show that gifted learners with multiple exceptionalities in New Zealand may not have adequate support at a systems level. Recommendations include the development of interprofessional practice competencies as one way to ensure gifted learners with multiple exceptionalities and their whanau experience full inclusion in our education system, and more research to evaluate whether effective IPP teams translate to more positive student outcomes.

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CHAPTER ONE

INTRODUCTION

1.1. Introduction

It is the right of every child to be afforded an education that allows them to develop their cognitive and social-emotional potential so that they can take full part in society. Inclusive education is the process by which schools transform themselves to meet the needs of all their learners (UNESCO, 2005). Gifted learners have often been outside of the shift towards inclusive education, resulting in an underserved population in our schools (Tannenbaum, 2000).

Since 2005, New Zealand schools are required [as per National Administration Guideline (NAG) 1iii(c)] to identify students who have special needs (including gifted and talented), and to develop teaching and learning strategies to meet the needs of these students (Ministry of Education, 2012a). The inclusion of gifted and talented students in this NAG was an important milestone for educating our brightest students, those who gifted advocate Professor George Parkyn defined nearly 40 years ago as having the ability to go 'beyond the known' (1975).

However, implementing this guideline has been a slow process. In 2008, the Education Review Office (ERO) reported that the majority of schools did not have a shared understanding of gifted and talented education, had not participated in appropriate professional development, and did not have gifted education resourcing that was well informed or planned. Nor was there sufficient evaluation of programmes to inform best practice (ERO, 2008). These findings support earlier research by Riley, Bevan-Brown, Bicknell, Caroll-Lind and Kearney (2004), that concluded gifted and talented students are often neglected in our schools. If this is the case for gifted and talented students, what then is the situation for gifted students who also have special needs? This unique group of students have been identified as more vulnerable than either special needs students *or* gifted students (Barber & Mueller, 2011) and thus their entitlement to inclusion is at even greater risk.

The revised Ministry of Education gifted and talented handbook recognises that there are gaps in NZ research around the best way to meet the needs of gifted and talented students having special needs (Ministry of Education, 2012b). Given that most learning for gifted

students (including those with special needs) takes place within the mainstream classroom in New Zealand (Martin, 2002; Riley et al., 2004), classroom teachers must be supported by other professionals to have an understanding of how to identify and cater for these students. One way of supporting teachers is with interprofessional practice (IPP) teams, an approach advocated for in international research (Fetzer, 2000; Landrum, 2001). The current research aimed to explore the interprofessional practice team who support the classroom teacher to find out how interprofessional practice teams work to identify and provide effective teaching and learning for the gifted learner with multiple exceptionalities.

1.2. Definitions and terminology

Interprofessional practice (IPP) teams

An IPP team is defined as two or more professionals working together towards a common goal, learning with, from, and about each other (Mentis, Kearney, & Bevan-Brown, 2012). In the context of this study, these teams may include gifted and talented (G&T) coordinators, guidance counsellors, health professionals, special needs coordinators (SENCO), Resource Teachers of Learning and Behaviour (RTLB) and others.

Gifted learners in Aotearoa New Zealand

Definitions of giftedness in New Zealand encourage heterogeneity and may include the spiritually, emotionally, entrepreneurially and culturally gifted, as well as those gifted in academic or sporting areas. The Ministry of Education (2012b) describes a gifted child as one who has higher than average ability (or potential) in one of these areas, compared to same age peers. New Zealand definitions also emphasise potential as well as performance, and so certain gifted behaviours assist in indicating intellectual ability. It is envisioned that "gifted and talented learners are recognised, valued, and empowered to develop their exceptional abilities and qualities through equitable access to differentiated and culturally responsive provisions" (Ministry of Education, 2012b, p.10). There is no one definition of gifted and talented learners, and all schools must adopt, adapt or create a definition that fits their context and culture.

Gifted learners with multiple exceptionalities

A unique group within the gifted are those who are gifted and also have one or more learning difficulties. The terms Gifted with a Learning Disability (GLD), Twice Exceptional, (2E), Gifted+, or Gifted with Multiple Exceptionalities are all terms used interchangably in national and international literature. In New Zealand, the term twice exceptional is commonly used, and defined as:

> gifted students whose performance is impaired, or high potential is masked, by a specific learning disability, physical impairment, disorder, or condition. They may experience extreme difficulty in developing their giftedness into talent (Ministry of Education, 2014).

The term twice exceptionality can create a dichotomy of gift versus difficulty, whereas the reality is that these learners may have high co-morbidity with more than one learning difficulty. With this in mind, this research study uses the term gifted with multiple exceptionalities, defined as:

> Gifted students whose performance is impaired, or high potential is masked, by one or more specific learning disabilities, physical impairments, disorders, or conditions. The difficulties inherent in turning potential into performance may necessitate support for positive socio-emotional affect, as well as support for learning.

1.3. Research Questions

The following research questions guided this study, and are based on the core competencies for interprofessional practice (IPEC, 2011):

- How do the differing values of various IPP team members fit with identification and provision for gifted learners with multiple exceptionalities?
- What knowledge is there of roles and responsibilities within the IPP teams, and how much confidence is there to identify and provide for gifted learners with multiple exceptionalities?
- What aspects of interprofessional communication assist, or do not assist in identification and provision for gifted learners with multiple exceptionalities?
- How does previous professional development in the area of teamwork (collaboration, consultation and communication, team roles, conflict resolution) affect identification and provision for gifted learners with multiple exceptionalities?

1.4. Research boundaries

The aim of this research was to explore the experiences of interprofessional practice teams within a case study methodology. The study does not attempt to evaluate the effectiveness of IPP teams and how this translates to positive student outcomes, nor does it attempt to offer generalisations about the state of identification and provision for gifted students with multiple exceptionalities across the country. However, it does aim to hold up a mirror to the interprofessional practices and core competencies of the IPP team through their responses. The expected outcome is an enhanced understanding of how IPP teams work to meet the needs of gifted learners with multiple exceptionalities at a systems level.

1.5. Summary

This study investigates interprofessional practice teams who work with gifted learners with multiple exceptionalities. This research adds to a growing body of New Zealand based research and specifically adds a systems level approach to research on gifted learners with multiple exceptionalities.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This literature review analyses theory and research from both education and health sectors on meeting the needs of gifted learners with multiple exceptionalities at a systems level. It is divided into two parts. The first looks at characteristics, prognosis and best practice identification and provision for gifted learners with multiple exceptionalities. The second part discusses the issues and recommendations for interprofessional practice teams. To guide the review, the four interprofessional practice core competencies of shared values, roles and responsibilities, communication, and teamwork are utilised (IPEC, 2011).

2.2. Characteristics of gifted learners with multiple exceptionalities

Gifted learners with multiple exceptionalities are recognised as a specific subset of gifted students (Baum, Owen & Dixon, 1991). Betts and Neihart (2010) table gifted children with multiple exceptionalities as one profile of gifted and talented students. This profile is shown in Table 1 and shows academic behaviours (both positive and negative), social and emotional affect, perceptions of others towards the child, identification strategies, and necessary supports.

One of the defining characteristics of twice exceptional children is the extreme asynchronous profile presented, what Tannenbaum and Baldwin (1983) describe as the 'paradoxical' learner. Gifted learners with multiple exceptionalities students may display greater uneven development across developmental domains than a solely gifted child (Baum, Dann, Novak, & Preuss, 2009; Singer, 2000).

Sturgess (2004) terms this an "intra-individual discrepancy between intellectual ability and performance" (p. 406) and gives the example of a child who is gifted enough to be able to use high order thinking skills to evaluate, predict, and create examples of Shakespearian language devices, but whose written work is neither rich, expressive nor elaborate. In a US study of students with very high cognitive ability, yet very low socialisation skills associated with Autism Spectrum Disorder (ASD), Neihart asks "You see why they are frustrated? And why we are frustrated with them?!" (2011, p. 5).

It is easy to see why gifted learners with multiple exceptionalities may be misidentified as gifted underachievers. Therefore, educators need to question whether a student can't, *or won't,* do the work (Silverman, 1989).

Table 1: Betts and Neihart Twice/Multi Exceptional profile

Feelings and attitudes	**Behaviours**	**Needs**	**Adult/peer perceptions**	**Identification**	**School support**	**Home support**
Learned helplessness Intense frustration & anger Mood disorders Prone to discouragement Work to hang on Poor academic self-concept Don't see themselves as successful Poor academic self concept Don't know where to belong	Makes connections easily Demonstrates inconsistent work Seems average or below More similar to younger students in some aspects of social/emotional functioning May be disruptive or off-task Are good problem solvers Behaviour problems Thinks conceptually Enjoys novelty & complexity Is disorganized Slow in information processing May not be able to cope with gifted peer group	Emphasis on strengths Coping strategies Skill development Monitoring for additional disorders - especially ADHD To learn to persevere Environment that develops strengths To learn to self-advocate	Requires too many modifications because of accommodation Seen as "weird" Underestimated for their potential Viewed as helpless Seen as not belonging in GT Perceived as requiring a great deal of structure Seen only for disability	Measure of current classroom functioning Achievement test scores Curriculum based assessment Examine performance over time Look for pattern of declining performance paired with evidence of superior ability Do not rely on IQ scatter analysis or test discrepancy analysis	Challenge in area of strength is first priority Acceleration in area of strengths Accommodations for disability Ask, "what will it take for this child to succeed here?" Direct instruction in self-regulation strategies Give time to be with GT peers Teach self-advocacy Teach SMART goal setting	Focus on strengths while accommodating disability Develop will to succeed Recognize & affirm gifted abilities Challenge in strength areas Provide risk-taking opportunities Assume college is a possibility Advocate at school Family Involvement Nurture self-control Teach how to set & reach realistic goals

Subgroups of gifted learners with multiple exceptionalities

Brody and Mills (1997) identified three subgroups of gifted children with multiple exceptionalities. The first group includes those identified as gifted who have subtle learning difficulties, who often do well at primary school, but whose learning difficulties become apparent at high school when the level of work increases in difficulty. The second group are

those who are not identified as gifted or having a learning difficulty, as they are achieving at an average or just above average level. These are the students whose difficulty cancels out the gift. There is a body of research concerned with the under diagnosis of both giftedness and Attention Deficit Hyperactivity Disorder (ADHD) in gifted children with multiple exceptionalities students due to the gift 'masking' the difficulty and vice versa (Leroux & Levitt-Perlman, 2000; Moon, 2002; Sturgess, 2004; Silverman, 1998). Third are the students who are identified for their learning or behavioural difficulty and are given remedial support, but their giftedness is not recognised. Although, as Cline and Hegeman (2001) point out, it is likely that giftedness with disability exists on a continuum across types and degrees, and so boundaries between groups may well be fluid.

2.3. Undiagnosed gifted children with multiple exceptionalities: The prognosis.

This documented different developmental trajectory from those gifted without multiple exceptionalities (Baum et al., 2009) can lead to vulnerability in the affective domain (Silverman, 2007), with chronic underachievement and negative self-concept as outcomes (Moon, 2002). Indeed, some authors believe that gifted learners with multiple exceptionalities are best understood within the set of issues on underachievement (Silverman, 1989; Kalbfleisch, 2013). Sturgess (2004) states that twice exceptional students in the New Zealand context would more likely be described as underachieving and unmotivated and not have the chance to do what Leroux and Levitt - Perlman (2000) call "reach beyond mediocrity" (p.5). Hill (2011) sums this condition up well in saying:

> When the precocious perceptiveness and heightened sensitivity of the gifted child co-exists with a debilitating learning difficulty, the stage is set for significant social and emotional dysfunction because the GLD student adopts a range of maladaptive perceptions and behaviours in the struggle against this perplexing condition (p. 22).

Social and emotional aspects of being gifted with multiple exceptionalities are fundamental to the learner's ability to lead a well-adjusted life (Assouline, Foley Nicpon & Huber, 2006). Therefore, as Kalbfleisch (2013) argues, the goal should be proactive identification and support, rather than a reactive response to the consequences of being twice exceptional.

2.4. Identification and provision for gifted learners with multiple exceptionalities: Why is it an issue?

Teacher/classroom level

The paradox of seemingly contradictory characteristics displayed by these learners, whose intelligence "circumvents the linguistic and linear requirements of school" (Kalbfleisch, 2013, p.360), has led to a lack of understanding, recognition, and provision by educators, and meant gifted learners with multiple exceptionalities are not being provided with programmes which meet their learning needs. Chapman and Tunmer (2000) found this was the case in New Zealand schools, where the invisible nature of specific learning difficulties, plus a lack of knowledge of effective intervention meant gifted children with multiple exceptionalities were rarely identified or provided for. Sturgess (2004) supports this conclusion, stating that whilst New Zealand schools can access support for students with physical, learning and behavioural difficulties/disabilities, and to some extent provide programmes for the gifted, a lack of widespread recognition of gifted children with multiple exceptionalities is a mitigating factor in providing effective intervention programmes.

Sturgess (2004) lists three areas of concern for the education of gifted children with multiple exceptionalities:

1. Identification procedures are failing to identify gifted children with learning difficulties;
2. Educators do not understand what it is like to be a gifted child with multiple exceptionalities, both academically and socially/emotionally;
3. Teaching strategies may be inappropriate, affecting both the academic outcomes and also self-concept.

In a study of 11 schools in NSW, Wormald (2007) found that schools were not able to identify gifted children with multiple exceptionalities and therefore could not meet their educational needs. Teachers exhibited inconsistent knowledge about these students and demonstrated a lack of understanding of how to meet their needs in the classroom – a situation of "contradictions, conflicts and confusion" (p.9).

Systems level

According to Sturgess (2004), gifted children with multiple exceptionalities in New Zealand are rarely identified within the school system, particularly for those students invisible to the system because they are not failing school, just failing to reach their potential (Kalbfliesh, 2012). This is supported by Wormald (2007) who concludes that identification is unlikely to occur "particularly when there is a definite and visible divide between students with learning difficulties and students who are gifted " (p. 9). In fact, research by Bianco (2005) found that special educators do not tend to look for gifted behaviours or refer these students to gifted education services. Teachers were more likely to strongly agree or agree to refer non-labelled students for gifted programmes than identically described students with either of the two exceptionality labels (Bianco & Leech, 2010).

2.5. How should gifted learners with multiple exceptionalities be identified and provided for?

Literature on gifted learners with multiple exceptionalities points to a need for professional collaboration, in order to successfully identify and cater for their needs. Researchers recommend and advocate for a multidisciplinary task force or consultation model to identify and provide for the twice exceptional learner, focussing on a multidimensional approach that has information from a variety of sources to develop individualised plans (Fetzer, 2000; Landrum, 2001; Nielsen, 2002; Ward, Pelco, & Landrum, 1998).

Fetzer (2000) supports the use of an assessment battery, teacher checklists of behaviour, parental interviews, and questionnaires, when identifying gifted learners with multiple exceptionalities. In addition, she also advocates for assessment to be a long and continuous process. Nielsen (2002) recommends a task force at district level, who take a collaborative, problem solving approach using expertise from all who service the child, including the parents. Landrum (2001) supports this collaborative approach, advocating for a consultation model to be used in schools. Project2Excel, a large, well-funded five year empirical study of government school districts in the USA, has enabled Rogers (2011) to present strategies for what works in identifying gifted children with multiple exceptionalities in terms of instrumentation, procedure and protocol. Five of the 11 strategies are related to interprofessional practice - specifically the use of professional teams, and their attendant

procedures and instruments to identify gifted children with multiple exceptionalities. Literature also attests to the need for pre-service education and professional development opportunities to recognise the profiles of twice exceptional students within both special education and gifted education paradigms if these students are to be included (Kalbfleisch, 2013).

In terms of provision, literature is in agreement that intervention should focus on developing the talent while attending to the difficulty. Challenge, accommodation, and remediation (in that order) yield more positive outcomes (Baum et al., 1991; Olenchak, 1995; Olenchak & Reis, 2002). Negative behaviours of twice exceptional students improve when those students participate in talent development programmes designed to identify and nurture individual gifts (Baum et al., 1996; Olenchak, 1995). Similarly, social and emotional problems can be ameliorated by moderating the context and providing a family and school environment which fits the child in terms of their high intellectual ability (Neihart, Reis, Robinson & Moon, 2002). Kaufmann, Kalbfleisch, and Castellanos (2000) offer strategies to cater for gifted learners with multiple exceptionalities, specifically those with ADHD, but which can be used for all twice exceptional students. These strategies foster creativity, engagement and motivation, with an emphasis on concepts before details (Winebrenner, 2003).

2.6. Interprofessional learning

In light of international research advocating for a multi-disciplinary approach to identification and provision of gifted learners with multiple exceptionalities, it is necessary to examine the literature on interprofessional practice more fully. There is limited data available in gifted and talented literature (certainly in NZ) on how interprofessional practice teams work to identify and provide effective education for gifted learners with multiple exceptionalities. However, literature from the health sector may inform our practice on core competencies and structures necessary for interprofessional practice.

Geva, Barsky, and Westernoff (2000) define interprofessional practice as “a highly integrated framework for collaboration among professionals” (p. 3). It is when two or more professionals work together towards a common goal (Mentis et al., 2012), and it is this

collaboration (learning with, from, and about each other) that distinguishes *inter*professional from *multi*professional.

The Interprofessional Education Collaborative Expert Panel ([IPEC], 2011) has identified four competency domains important for successful interprofessional practice. These are: values and ethics; roles and responsibilities; interprofessional communication; teams and team work. These core competencies will be used here as a framework for reviewing the literature.

2.7. Interprofessional practice competencies

Values

Whilst each profession may have different values and codes of ethics, within the interprofessional practice (IPP) team there must be a development of shared values and mutual respect (IPEC, 2011). A critical benefit of interprofessional education and practice is that it contributes to the goals of inclusive education. Gifted learners with multiple exceptionalities perch precariously atop the moving plates of inclusion education, and as such are well placed to act as an indicator to the success of interprofessional practice at the systems level.

Inclusion means transforming schools so that they can meet the needs of their diverse population (UNESCO, 2005). Historically in New Zealand, there has been a belief by educators that gifted education is not part of inclusive education. Moltzen (2006) and Smith (2006) believe that gifted learners have been ignored because of a focus on geographical place (where learners learn), rather than on inclusion, meaning learning needs are met. Kearney (2013) argues that the term inclusive education has been "highjacked" to represent special education, and in so doing has created a stumbling block to the advancement of inclusive education in New Zealand.

Whilst the principles underpinning gifted education fit well with the theory of inclusive education (Smith, 2006), in practice schools may be focussing on exclusive responses such as "narrow definitions, limited identification practices and segregated programmes" (Riley, 2013, p.192). Further, Riley argues that the gap between inclusive education and gifted and talented education runs both ways, so that gifted learners cannot access inclusive research,

policies and practice. This can make it difficult for gifted learners to access special needs provision, and for special needs learners to be recognised as gifted (Siegle & McCoach, 2005; Richey & Ysseldyke, 1983). This dislocation of gifted and talented education from special education cannot provide a continuum of provision for gifted learners with multiple exceptionalities, will not meet their learning needs and therefore result in Moltzen's (2006) conclusion that in many 'inclusive' classrooms, the gifted and talented remain excluded.

Another example which may illuminate the practical difficulties of working in an interprofessional team with differing values is whether "need" for support is based on affective issues or on baseline performance. Berresford (2010) argues that a child with statistically significant differences between their learning abilities (as measured by psychometric intelligence testing) can have learning, emotional, social and behavioural needs. The argument for discrepancy testing as a means to identify gifted learners with multiple exceptionalities is supported by Fetzer (2000) and Rogers (2010). However, there is resistance from special education literature to support intelligence testing as diagnostic (Aaron, 1997). There is inconsistency between the gifted and special education literature on the value of specialist assessments when it comes to gifted learners with multiple exceptionalities.

Roles and responsibilities

When professionals share their expertise in team situations, all members grow in confidence, expertise and understanding, and outcomes for students are positively impacted (Dettmer, Thurston, Knackendoffel, & Dyck, 2009). Being competent at knowing one's own roles and responsibilities and understanding other's complementary roles and responsibilities is a core competency for interprofessional practice (Suter et al., 2009). Team members can limit the work of the whole team if they lack individual expertise in their own area (IPEC, 2011), and so effective interprofessional practice depends on team members having the requisite skills and being able to articulate these to others.

Interprofessional education

One enabler to improving competency in roles and responsibilities has been interprofessional postgraduate education. A study of health professionals in Wellington found that interprofessional postgraduate education improved the health care workers' own practice,

increased their understanding of their own and other health professional roles, and was seen as positive (Pullon & Fry, 2005).

There have been some attempts in New Zealand education to share knowledge of gifted learners interprofessionally, with mixed success. In an article in *Kairaranga*, Cathcart (2002) urges RTLB to use their position to demystify giftedness, however, a search of "gifted" on the Ministry of Education RTLB online pages revealed 0 results. With regard to school counselling services, Blackett and Hermansson (2005) state that whilst educational developments for gifted and talented students over the last 10 years or so required a complementary response from school guidance counselling services, there has been no initiative or overall policy to bring this about. Instead, they argue that the decentralised system has "left it largely in the hands of interested counsellors and guidance personnel to respond as they see fit" (p. 281), with limited local research, no preservice training and few specialist providers.

A new specialist training qualification was developed in an attempt to honour the intention of Success for All (Ministry of Education, 2010). The Post Graduate Diploma in Specialist Teaching commenced in 2011 at Massey University and the University of Canterbury to increase the pool of people with expert knowledge available to support students, teachers and schools in one of the six following areas: Autism Spectrum Disorder, Blind and Vision Impairment, Deaf and Hearing Impairment, Early Intervention, Gifted and Talented, Learning and Behaviour. This programme includes interprofessional practice as a key area of learning, however the gifted and talented endorsement is not supported by the Ministry of Education. Evidence of successful outcomes of this initiative are not yet available.

Difficulties with definition

In order for educators to recognise, understand, identify and provide for gifted children with multiple exceptionalities, there must be a workable definition. Unfortunately for gifted learners with multiple exceptionalities, it is difficult to provide a robust definition. This is due to a combination of exacerbating factors. Firstly, gifted students have been recognised as one of the most diverse group of learners in our schools (Neihart et al., 2002). There are few, if any, behavioural characteristics or traits common to all. Secondly, the

definition of gifted varies from country to country, and from school to school in NZ, with the aim of ensuring cultural and community appropriateness. In addition, there are many definitions of special needs, but each is individually defined by the professionals working in that area (Wormald, 2007). It is not difficult to see that a universal definition of gifted children with multiple exceptionalities has been hard to come by, and how this may well be a factor in low levels of teacher understanding and provision.

Interprofessional communication

Communication is identified by IPEC (2011) as a core aspect of interprofessional practice, involving "speakers and listeners who share reciprocal roles by sending and receiving information and constantly checking that their message has been understood" (Conderman, Johnson-Rodriquez, Hartman, & Kemp, 2010, p. 177). Working interprofessionally requires many methods of communication to be used with a wide range of specialists, professionals and the wider community. Docherty and McCallum (2009) have devised a list of interprofessional communication skills for the health sector, which include showing awareness of differing professional jargon or language, taking time to be sure your contribution is understood, and identifying professional boundaries. Interprofessional communication becomes increasingly important as new technologies and ways of working mean that traditional face to face meetings may not be the only channel of communication.

Interprofessional teams working with gifted learners with multiple exceptionalities may find the use of jargon, acronyms and differing terminologies (e.g., GLD, 2E, G&T, GATE) can seriously undermine the ability to communicate effectively across professions, especially if those professions then make assumptions about the comprehension of other professionals (Schwarz, Lowe, & Sinclair, 2010). Frequency of meetings and frequency of dialogue also affect the function of an interprofessional practice team (Bennett-Emslie & McIntosh, 1995; McCallin, 1999).

Teams and teamwork

Interprofessional teamwork means learning to be a good team player on behalf of the shared goals with clients (IPEC, 2011). Understanding team roles, team processes and team dynamics can assist team effectiveness. According to IPEC, communication, consultation,

collaboration and conflict management are important skills for interprofessional practice teams. Effective communication skills are seen as critical to teachers today (Friend & Cook, 2010). Teachers no longer consider themselves working in isolation with their class as their sole responsibility. However, Conderman, Morin, and Stevens (2005) found that whilst teachers spend an increasing part of their job communicating with other adults, they feel ill prepared to do so. Conderman, Johnston-Rodriguez, Hartman, & Kemp (2010) offer practical suggestions to enable better adult to adult communication, such as setting rules for interprofessional meetings.

The aforementioned Post Graduate Diploma in Specialist Teaching at Massey University which commenced in 2011 explicitly teaches interprofessional practice teamwork skills. Therefore the specialist endorsements on this course are formally instructed in the theory and practical application of communication skills, consultation and collaboration. The diploma is compulsory for RTLB training-all other specialisms take the course voluntarily, with discretionary Ministry of Education funding for fees and study leave. Registered Teacher Criteria requires NZ teachers to establish and maintain effective professional relationships focused on the learning and well-being of all äkonga, however no mention of interprofessional skills and no explicit teaching of these skills is required/ advised (New Zealand Teachers Council, 2010).

Given the importance of communication, consultation, and collaboration for all those involved in working with gifted learners with multiple exceptionalities, one critical question must therefore be what training - formal or informal - has been undertaken in this area by members of the IPP team?

2.8. Individual Education Plans (IEPs)

An IEP is a written plan, developed collaboratively by all that know and work with a student, setting out a student's goals and ways to help the student achieve those goals (Niederer, 2013). IEPs are one of the best ways to ensure that the needs of the gifted learner with multiple exceptionalities are being met (Fetzer, 2000). Morrison and Rizza (2007) state that an IEP for a gifted learner (with and without multiple exceptionalities) should include similar structures to an IEP for special needs students, namely: reasons for the IEP; specific

areas of ability and concern; outlines of measureable actions; responsibility; progress monitoring; and timeframe (Niederer, 2013). An IEP can serve as a guide for managing testing, placement, instruction, and procedural safeguards (Davis & Rimm, 1985).

According to the Ministry of Education, schools and parents decide together whether a student with special educational needs will have an IEP (MoE, 2012c).Whilst IEPs for special needs students are well known in NZ schools, there is no NZ data on how often, or how effectively IEP's are used for gifted learners with multiple exceptionalities. Schools establish their own criteria to decide who does, and who does not, need an IEP (Niederer, 2013).

2.9. Structural Organisation and Interprofessional practice

In addition to literature on the core competencies of interprofessional practice, there is also literature available on the way systems and structural organisation can facilitate interprofessional practice. The World Health Organisation (2010) makes a number of recommendations for interprofessional practice within the health sector. These have been adapted for education by Mentis (2013), and include:

- policies recognising and supporting collaborative practice;
- environments promoting and supporting interprofessional practice;
- delivery models allowing adequate time and space to collaborate; and
- governance models establishing shared responsibility.

2.10. Summary

Research on the unique characteristics of gifted learners with multiple exceptionalities has highlighted difficulties with definitions and terminology. Analysis of the literature on the academic and social-emotional needs indicates that identification rates are either poor, or, in the case of New Zealand, not available, even though there is strong evidence of the negative outcomes faced by gifted learners with multiple exceptionalities if their academic and socio-emotional needs are not met.

Literature on the identification and provision for gifted learners with multiple exceptionalities has also highlighted the requirement for the expertise of a range of education

and health professionals who must work together interprofessionally to provide the best outcomes. Interprofessional learning and interprofessional practice teams can support teachers and other specialist education services through developing the core competencies of values/ethics, roles and responsibilities, communication, and teamwork.

In terms of values/ethics, the historical positioning in New Zealand of gifted and talented education outside inclusive education may have affected multidisciplinary provision for gifted learners with multiple exceptionalities. The "no testing" stance taken by New Zealand special education services may also have contributed to a low identification rate.

Research shows that whilst a clear knowledge of one's own area of specialism, as well as an understanding of other roles within the group, is essential for interprofessional practise, it is questionable whether special educators in New Zealand have a comprehensive understanding of gifted learners. Similarly, it is questionable whether gifted educators have a proficient knowledge of special educational needs policy and practise. Difficulties with definitions may also make for less clearly defined roles and responsibilities.

It is clear that interprofessional jargon must be understood by all, there must be enough time for meetings to be effective, and new technologies must assist with effective communication strategies. In addition, there must be no power hierarchy within the communication process. In terms of teamwork, some specialist educators (RTLB) are required to have formal training in teamwork, however the majority are not and may not have the skills required to practice interprofessionally.

It is not clear how much development of these core competencies is evident within the interprofessional team supporting the gifted learner with multiple exceptionalities. Individual Education Plans (IEPs) are a common example of working interprofessionally, however their efficacy depends on the efficacy of the interprofessional team using them. We do not know how often or how well IEPs are used with gifted learners with multiple exceptionalities. In addition, systems level structures such as funding models, delivery models, built environments, and governance models all contribute to the effectiveness of interprofessional practise.

Much of the literature on effective interprofessional practice comes from the health sector, both internationally and within New Zealand. The specific structures and competencies within interprofessional practices that enable effective provision for gifted learners with multiple exceptionalities have not been fully researched. Research needs to be undertaken in order to understand how interprofessional practice in Aotearoa/New Zealand is conducted, to understand, identify, and provide for gifted learners with multiple exceptionalities.

CHAPTER 3

METHODOLOGY

3.1. Introduction

As demonstrated in the literature review, gifted learners with multiple exceptionalities require a collaborative, multi-disciplinary team approach to best meet their needs. There is anecdotal evidence that their needs are not being met within New Zealand, despite empirical evidence of the negative effect of non-identification and lack of provision, both in the academic and affective domain. There is a need for New Zealand based research surrounding interprofessional practice teams and gifted learners with multiple exceptionalities. This research sought to find out how IPP teams work to identify and provide for gifted learners with multiple exceptionalities, with the aim of contributing to the knowledge base on gifted learners with multiple exceptionalities and also on interprofessional learning in New Zealand educational settings.

The following research questions guided this study, and are based on the Core Competencies for interprofessional practice (IPEC, 2011):

1. How do the differing values of various IPP team members fit with identification and provision for gifted learners with multiple exceptionalities?
2. What knowledge is there of roles and responsibilities within the IPP teams, and how much confidence is there to identify and provide for gifted learners with multiple exceptionalities?
3. What aspects of interprofessional communication assist/ do not assist in identification and provision for gifted learners with multiple exceptionalities?
4. How does previous professional development in the area of teamwork (collaboration, consultation and communication, team roles, conflict resolution) affect identification and provision for gifted learners with multiple exceptionalities?

This chapter outlines the research procedures used in the study. The research used a qualitative case study methodology to explore the practices of interprofessional practice teams, who have worked with one or more gifted learners with multiple exceptionalities over the last 2 years. Data collection techniques included an online questionnaire, interviews and a

document analysis of policies and procedures. Participation was invited through three websites that serve gifted and special needs educational communities. A total of seven IPP teams agreed to participate in the survey, and of these, three teams agreed to be interviewed. The research was assessed by the researcher and supervisors as low risk, and accepted as such by Massey University. This chapter outlines the theory behind each research component and explains how this literature informed the research design in this study. The research components comprise research design, sample, data collection, data analysis, ethical considerations, validity/reliability/limitations, and will be dealt with in that order.

3.2. Research Design

Qualitative Research

"Not everything that can be counted counts,

and not everything that counts can be counted " (Albert Einstein)

Qualitative research is involved with answering "what", "why", and "how" questions about a phenomenon to try to understand experiences and attitudes (Bricki, 2007). It does not make inferences about the underlying population – rather, it emphasises meanings, experiences and descriptions, attempting insight into processes and practices (Connolly, 1998). Due to its emphasis on *understanding*, qualitative research "offers the greatest promise of making a difference in people's lives" (Merriam, 2009, p. 1). The difference between the quantitative and qualitative experience can be summed up by Coolican (2013), who says "it is rather like the difference between counting the shapes and colours of a pile of sweets as against feeling them, playing with them, eating them" (p. 50).

Qualitative research is most often positioned philosophically within an interpretive/constructivist epistemological perspective, where different realities are constructed according to the world view and experiences of the individual, through interactions with others and culture (Creswell, 2014). It follows an inductive process, where data is gathered to build into theory from rich, varied and descriptive sources, rather than a deductive testing of hypotheses. There are different types of qualitative research, all of which have a primary goal of understanding how people make sense of their experiences. Case study is one type (Merriam, 2009).

Case Study

Theory

A case study is a term that can be used both for defining the unit of study and also for the research process. When talking about the former, Merriam (2009) defines case study as "an in-depth description and analysis of a bounded system" (p. 40). When talking about the latter, case study is used for a family of research methods which focus an enquiry around an instance (Adelman, Jenkins, & Kemmis, 1976). Case studies involve gathering detailed information from many sources about an individual or group in a real life context in order to explore or describe a phenomenon (Baxter & Jack, 2008). Case studies focus on "process rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation" (Merriam, 1998, p.19).

Because of their flexibility but also their rigour, case study methodology can be used for theory development, intervention design and programme evaluation (Baxter & Jack, 2008). Methodology is eclectic, although techniques such as survey, interview, observation, document analysis are common. Adelman et al. (1976) stress that triangulation of these methods is at the heart of case study research, because it allows the researcher to respond to multiple perspectives.

Case studies can be single or multiple case - deciding which to use depends on the case and research questions (Yin, 2014). Multiple case studies enable data to be pooled, sorted and analysed, in order to identify common factors or experiences (Coolican, 2013). The researcher can explore differences or similarities within and between cases, as predicted by theory. Because evidence can be replicated, multiple case studies can be more reliable and robust than a single case study and can therefore be considered as similar to multiple experiments (Yin, 2003).

In Practice

In order to find out how interprofessional practice teams work to cater for gifted learners with multiple exceptionalities, a qualitative research approach in case study format was applied. This study emphasises the 'how' and 'why' questions, with participants whose context is relevant and not always clearly separate from the phenomenon (Yin, 2014). It was also possible to characterise this case study as being descriptive, particularistic and heuristic (Merriam, 2009). It describes the phenomenon in depth by gaining information from many

sources (survey and interviews). It focuses on a particular event or group (the interprofessional practice teams), and through the case study can explain the reasons for a problem (identification and provision of gifted learners with multiple exceptionalities). The case here was bound by definition and context (Miles & Huberman, 1994), i.e. by defining both interprofessional practice teams and gifted learners with multiple exceptionalities, within the context of working together over a certain period of time. This is especially important in multiple case study methodology, where cases must be chosen carefully so that the researcher can predict similarities and differences across cases based on a theory (Yin, 2014).

Literature-based propositions help a case study stay within agreed and feasible limits, and therefore enable completion of the project. Used individually, they focus the data collection; Used together, they inform the conceptual framework (Baxter & Jack, 2008). The propositions of this case study are:

1. Values may not be shared between IPP team members.
2. IPP teams need to know the roles and responsibilities of each member of their team, including themselves.
3. Communication is necessary for competent interprofessional practice
4. There has been little explicit training in IPP teamwork models of consultation/collaboration/communication.

The study aimed to understand how things happen in interprofessional practice teams, and why they happen the way they do (Anderson, 1998). It used multiple data sources to enhance the credibility of data in the project, as each piece of data can be used to build an understanding of the whole picture (Yin, 2003). Differences, similarities and themes that emerged between each interprofessional practise team were noted. In this way it was hoped that the study would illuminate some general ways interprofessional practice teams work, by looking at the particular (Denscome, 2003)

The study was mainly descriptive, exploratory, or revelatory, in that it was the first research completed on interprofessional practice teams and gifted learners with multiple exceptionalities, certainly in New Zealand. It was not known how interprofessional practice teams work with this group of learners and therefore what the findings would be. Findings

were then analysed with reference to the interprofessional practice core competencies (IPEC, 2011).

3.3. Sample

Theory

In qualitative studies, participants are rarely sampled from a target population, because researchers are not intending to make inferences that generalise about the underlying population. Because the goal in qualitative research is more often to obtain insight into a phenomenon, non-probability sampling techniques such as convenience and purposive sampling can be used (Davidson & Tolich, 2003). Convenience sampling involves using those who are willing and able to take part in the research. In purposive sampling, the researcher will purposefully select the participants to fit the bill (Onwuegbuzie & Leech, 2007). In multiple case study research, appropriate selection is necessary to provide the most information-rich data possible to understand the phenomenon (Patton, 1990; Yin, 2014), and so purposive sampling is a common and powerful technique in qualitative methodologies.

Similarly, there are no rules as to how large a sample must be. Qualitative studies are idiographic, aiming to study an individual experience in depth, rather than nomothetic, where sampling is used to represent a population about which generalisations can be made (Coolican, 2013; Morrow, 2005). Large numbers of people therefore are not necessary to assure quality or adequacy of findings (Morrow, 2005). Patton (1990) states that in qualitative inquiry validity, meaning, and insight depend more on the richness of the cases chosen than on the size of the sample. Crouch and McKenzie (2006) argue a positive case for a smaller sample size, so that the close association of researcher and participant can be facilitated and in-depth study can enhance validity. This is supported by Dreher (1994).

In Practice – the teams

Using convenience and purposive sampling, interprofessional teams were recruited through the Te Kete Ipurangi Gifted and Talented Online list serv, through GiftEDnz: The Professional Association for Gifted Education's newsletter, and through the NZ RTLB association and on the TKI Online RTLB page. Expressions of interest were invited from

interprofessional teams of two or more specialist personnel who have worked together with gifted learners with multiple exceptionalities over the last two years. It was anticipated that the interprofessional practice team would include a professional from the gifted and talented area and/or a professional from special needs, however, these were not exclusive categories.

After the initial online invitation, interprofessional teams who responded were invited to complete an online questionnaire. This questionnaire remained active for the month of May and the first two weeks of June. The questionnaire yielded seven interprofessional team responses. A copy of this questionnaire is in Appendix D.

From the three interprofessional teams who indicated they would be willing to participate in an interview, all were chosen, to yield maximum variation in size, location, make up of team, cultural and socio-economic diversity. Pairwise sampling design was used, where each case is compared to all other cases one at a time, and comparisons can then be undertaken (Onwuegbuzie & Leech, 2007) . In pairwise sampling, the set of cases can be selected because they are homogeneous, or to yield maximum variation - either is acceptable.

Setting

The online questionnaire meant that participation for this part of the research was undertaken wherever IPP team members had internet access to individually complete the survey. The interviews took place via telephone, via Skype, or in person. This depended on geographical location, preferences of and convenience for participants.

3.4. Data Generating Instruments

According to Patton (2002) and Merriam (2009) qualitative case study predominantly involves three collection techniques – interviews, observations and document analysis and is about "asking, watching and reviewing" (Merriam, p.85). Questionnaires or survey research are another technique (Tuckman & Harper, 2012). This section describes the questionnaire and interviews used.

Survey Research

Theory

Questionnaires (and interviews) allow us to measure a participant's knowledge, likes and dislikes, attitudes and beliefs, both in the past and the present (Tuckman & Harper, 2012). Surveys may be conducted in many different ways, but all surveys are observational and non-experimental, with no manipulation of variables, and so they are not well suited to looking at causal processes. They are the most commonly used method of gathering data in educational research (Burns, 2000).

Maximising response rates and completion of questionnaires

To ensure a successful outcome, Frankel, Wallen and Hyun (2012) summarise recommendations as:

a) Questionnaire administration. Ensure that the setting is convenient, that the respondent knows something about the study, and that they have the technological expertise to access the study. Response rates improve when non-respondents are subsequently contacted, contacts are personal, and participants are contacted before the survey was sent out (Cook, Heath, & Thompson, 2000).
b) Questionnaire format. Order of items, ambiguously worded questions and emotively threatening questions can all bias response (Rattray & Jones, 2007). The format should be attractively laid out, and of an optimal length (Comley, 2000). Likert scales useful to measure attitudes and opinions and are easy to administer (Oppenheim, 1992).

A key strategy when designing questionnaires is to frequently refer to the research questions that have come out of a literature review, and ensure all questions asked in the survey are relevant to these key questions (Oppenheim, 1992). This, plus consultation with experts and proposed respondents should ensure face and content validity (Rattray & Jones, 2007).

There is disagreement within the literature that whilst closed questions may be easy to score and analyse, they may not give rich enough data for qualitative purposes. Creswell (2014) recommends a survey which mixes closed questions and open ended questions to allow more in depth answers. This is particularly important in exploratory research where the researcher does not know what the range of answers might be. However, difficulties with coding and analysis are evident with open ended questions.

Online surveys/questionnaires – advantages and disadvantages

Until recently, preparing and conducting an online survey required high technological and programming skills (Wright, 2006). Now, online surveys are becoming increasingly common, and have several advantages over paper based surveys. They are efficient and convenient, collecting responses in a short time frame from participants in remote locations (Lefever, Dal, & Mattiasdottir, 2007; Sue & Ritter, 2007). This time and cost saving may make a hitherto unworkable research project feasible (Wright, 2006). They may also make it possible to survey participants who would not respond to more traditional forms of surveying, and allow participants to complete the survey in their own time and chosen location (Lefever et al., 2007). Evidence also suggests that participants respond in more detail with an online survey than a pen and paper survey (Schaefer & Dillman, 1998).

The disadvantages to using questionnaires centre around the fact that questionnaires require data to be gathered by asking people. Self-reporting means that a researcher can only measure what a person *says* they believe, like or do, rather than what they may actually believe, like or do, which can affect validity (Wright, 2006; Tuckman & Harper, 2012). However, asking can often be the most efficient way to obtain information (Tuckman & Harper, 2012). Another set of disadvantages centre around technical issues of service providers, new technology and the digital competence of the respondent (Lefever et al., 2007).

In Practice - surveys

To look at how interprofessional practice teams work together, cross sectional survey design was used to collect data, as this measures attitudes and practices at a point in time (Creswell, 2014). An online survey was chosen as the primary source of data collection for this study (see Appendix D), based on research indicating its usefulness in terms of low cost, fast response times and the need to access participants who are geographically scattered (Lefever, Dal, & Mattiasdottir, 2007; Sue & Ritter, 2007; Wright, 2006). Teachers and other education professionals lead extremely busy and varied professional lives, and so a questionnaire that is efficient and can be done at their convenience is likely to elicit the best results. Many of the contacts knew or knew of the researcher professionally, especially within the gifted online community, which increases response rates (Cook et al., 2000). The

questionnaire also looks professional and gives clear branding of the education authority that authorised the research (Comley, 2000).

The survey questions were grouped around IPP Core Competencies and all questions were relevant to key research questions. Survey question format included closed, multiple choice, Likert scale, and open ended questions. Including open ended questions meant that more information was available that could then be used to inform research questions for interview. This was especially important in this exploratory study where the researcher did not know what responses might be.

The set of questions was built in Word and then set up in SurveyMonkey, the online questionnaire provider. It was trialled and refined with the supervisors and a 'critical friend' of the researcher. Each IPP team that responded was emailed their own online survey to fill in, coded only for that IPP team. All surveys were identical, however coding each IPP teams' survey by location (e.g. Christchurch 1, Southland, Auckland 1 etc) enabled the researcher to collate and analyse the responses within each IPP team, as well as between teams. This made data handling manageable.

The questionnaire was divided into seven sections, as shown in Table 2. Each section had questions relating to interprofessional practice core competencies as derived from the literature review.

Table 2: Questionnaire overview

Sections	Details
1. IPP team information	Number in team, specialist job, qualifications, years in job
2. Individual education plans (IEPs)	Involvement in and confidence with attending, instigating and facilitating IEPs
3. Roles and responsibilities	Professional and interprofessional knowledge about roles and responsibilities with gifted students, special needs students, and gifted students with multiple exceptionalities.
4. Values and ethics	Attitudes to and feelings about gifted students and their access to services, beliefs about provision.
5. Interprofessional communication	Methods and frequency of communication, jargon, access to information
6. Teams and teamwork	Information about specific PD in collaboration, consultation, conflict-management
7. Enablers and barriers	Systems, practices and competencies that facilitated or hindered the IPP team working

Addressing issues with survey research

Survey research can have a poor rate of uptake/completion. In this study, it was not known how many IPP teams are working in New Zealand, so it was not known what the rate of uptake might be. Although qualitative research does not require a minimum sample size in order to generalise findings, this study did require enough IPP teams for rich and varied data to be gathered. This was estimated at between 6 and 10 teams. However, the researcher became aware that terminology within the invitation may have put potential respondents off (Comley, 2000). The use of 'interprofessional practice teams' as a term is not well known in general education and may have 'scared some away' (personal communication, May, 2014). This terminology also meant that educators did not see the relevance of the survey (Comley's second factor affecting response rate). Therefore, a second email invitation was sent out, this time with a new simpler message:

1) re-explaining what was required;
2) pointing out the researcher's role in gifted education in NZ (as a teacher), the names of supervisors, and acknowledging the close links of the gifted teaching community;
3) alerting professionals to the importance of NZ research in this area, with the aim of arousing more sense of ownership and participation in the study.

This second email had a much greater response rate than the first, also because there was a building of personal rapport (Cook et al., 2000).

The questionnaire was trialled and refined with supervisors, and adjustments to wording and questions were made to avoid ambiguity. Piloting the questionnaire with colleagues outside of the field of gifted education (e.g. classroom teacher) may have avoided the problems with unfamiliar terminology potentially reducing the number of respondents.

Interviews

Theory

Interviews are one of the mainstays of qualitative data gathering (Merriam, 1998; Yin, 2014). The main purpose of an interview is to find out what is inside the participant's head, that cannot be readily observed, such as feelings, intentions for the future, and behaviours of

the past (Patton, 2002; Tuckman & Harper, 2012). Interviews are used for small scale intensive case study research, yet are flexible enough to be used with large numbers of people.

Merriam (1998) categorises interviews into three main types depending on their level of structure. Highly structured or standardised interviews have predetermined wording, a predetermined order of questions and the same purpose as a survey, albeit in oral form. Semi structured interviews are guided by the issues, with no pre-planning of question order and wording. Unstructured interviews are more like a conversation, using open ended questions that are flexible on depth and knowledge, and enabling a true assessment of what the respondent thinks (Cohen & Manion, 1997; Creswell, 2014; Yin, 2014).

Qualitative research steers away from highly structured questions so as to allow access to a person's own understanding and perceptions of an issue (Merriam, 1998). Morrow (2005) contends that the shorter and fewer the questions asked, the more meaningful and richer the responses tend to be. However, Merriam cautions that a completely unstructured interview demands high levels of skill from the interviewer to avoid "being lost in a sea of divergent viewpoints and seemingly unconnected pieces of information" (p. 91). Thus, the middle ground of the 'interviewer as guide' approach can often yield the most pertinent information by being able to respond to the situation as it unfolds (Patton, 2002; Frankel, Wallen & Hyun, 2012). In this approach, issues are planned beforehand, but only in outline, and the researcher decides on the wording and sequence of the questions as the interview unfolds. This means that data collection is more systematic, yet interviews still remain informal and conversational.

The limitations of interviews are similar to questionnaires, in that self-reported data may be influenced by what a respondent thinks will create the best impression, and their level of self-awareness (Tuckman & Harper, 2012). Yin (2014) encourages researchers to consider interviews as verbal reports, and therefore subject to problems of recall, articulation and bias.

In Practice - interviews

IPP team members were interviewed to gain an in depth understanding of how their particular IPP team worked. The aim of the interview was to build on the data from the surveys to create a richer data pot. Following collection and analysis of the survey data all

three IPP teams who had indicated on the survey that they were willing to participate in an interview were contacted. Therefore, interview participants were self-selected. All those who indicated that they would like to take part were able to do so.

Teams were interviewed by a variety of methods depending on their preference (face to face, telephone, skype. The three teams who agreed to be interviewed could not be interviewed all together for various reasons such as being out of town, disinclination, maternity, lack of mutually suitable time. Participants were happy for the researcher to share their responses with the other team members, so that there was some form of interaction taking place. However, a limitation of the methodology is that there were no focus group style of interviews, as intended, and therefore no data generated from the social interaction of IPP team members. Three of the other four teams responded in detail to further questions via email.

The interviews required informed consent and participants were aware that they could choose not to answer any questions and could terminate the interview process at any time. Interviews were in the 'guided conversation' format (Yin, 2014). It was important to keep interviews focussed on the workings of the team, as participants tended to drift towards talking about the actual child, rather than the team supporting the child, and thus needed redirection by the moderator a number of times. Questions that guided the interviews are given in Table 3 below and were derived from the literature review. Using interviews in combination with questionnaires meant a greater depth of understanding was possible.

Table 3. Interview Guide for Participants in an Interprofessional Practice team

How important was it for each member to know about other roles and knowledge within the team?

- Who defined gifted learners with multiple exceptionalities?
- IEP process
- Primary responsibility
- Provision
- Formal education and study

In what ways did you think your IPP team had shared values and beliefs around gifted learners with multiple exceptionalities?

- Access to services
- Myths

How did your team communicate?

- Understand jargon
- Modes of communication
- Frequency of meetings-why?
- Accessing documents and policy

Teams and teamwork training?

- Consultation
- Collaboration
- Systematic group processes
- Formal recognition of process

What were barriers and enablers?

- More successful core competencies – why?
- Less successful core competencies- why?

Researchers in the qualitative field must be able to demonstrate that their studies are credible (Creswell & Miller, 2000). When the researcher is interviewer, there may be possible bias, as the findings will be seen through the 'lens' of the researcher. Creswell and Miller state the importance of acknowledging researcher reflexivity, where the assumptions and beliefs of the researcher are stated in the research in some way. Of course, another way may be to have an interviewer who is not the researcher. In this case, the interviewer needed to be sensitive to and knowledgeable about the research. Because this research was exploratory and spans gifted education, special education and interprofessional practice, it was unlikely that an outside interviewer would have been able to be as responsive as the researcher when conducting interviews. Thus having researcher as interviewer in this case was considered the best design to elicit the necessary richness of data.

Interviews were recorded on a laptop using the Audacity programme. This worked for incoming phone calls as well as face-to-face interviewing. These audio files were transcribed

by the researcher. Interviews lasted approximately 35-40 minutes and took place whenever the respondent chose. Telephone interviews were in the evening and face-to-face interviews occurred within school hours**.**

3.5. Data Analysis

Theory

Analysis involves transforming data into findings. In qualitative analysis, the challenge is to effect that transformation with no set formula, ground rules, or well defined technique (Patton, 2002; Yin, 2014). The data is not numerical, is unstructured, and is in text format (Basit, 2003). Guidance and direction can be useful, but the final destination "remains unique for each inquirer, known only when - and if - arrived at" (Patton, 2002, p. 432). Despite its difficulty, Basit (2010) defines data analysis as the most crucial aspect of qualitative research.

Yin (2014) attests to the importance of having an overall analytic strategy, considered from the beginning of the study. He describes four general analytical strategies:

Relying on theoretical propositions. This strategy analyses data following the propositions that led to the study, which came from a set of research questions that themselves came from a review of the literature.

Working from the ground up. This inductive strategy contrasts with the one above as it starts with the data and continues to play with information until useful concepts appear.

Developing a case description. If there is data but no propositions, or no concepts suggest themselves from the data, the case study can be organised as a descriptive framework.

Plausible rival explanations. This strategy can be used in conjunction with the other three, and involves trying to define and test rival explanations.

One technique used in multiple case study analysis is that of cross - case synthesis (Yin, 2014). This technique assumes each case study as a separate study, with findings aggregated across the case studies.

The actual mechanics of analysis begin with ways to start an analytic strategy, as outlined by Yin (2014) and Creswell (2014). Firstly, data must be manipulated by moving the data around and looking for patterns that might give one an insight. This can be in the form of

tables, matrices, lists, timelines (Miles & Huberman, 1994). Secondly, memos can be used. These are notes written during fieldwork and analysis that may contain initial thoughts and interpretations of the data (Corbin & Strauss, 2007). After reading through the data many times, a coding or classification system is developed (Creswell, 2014), which will eventually generate themes and descriptions that can be interrelated and interpreted. Coding data allows the researcher to communicate and connect with the data in order to comprehend it (Basit, 2010). Chunks of data (phrases, images, sentences) are organised by tags or labels according to meaning, which may generate description and interrelated themes within the case. Miles and Huberman (1994) recommend a provisional list of codes that come directly from the research questions.

Data can be coded electronically with a programme such as NVivo. However, computer programmes do not absolve the researcher from the responsibility to think and deliberate, nor do they have any input in the iterative process required to replace codes for codes which may be more illuminating (Basit, 2010). Therefore the choice between electronic and manual coding depends on the factors such as time and finding and also the inclination of the researcher.

Whilst many texts make a distinction between data collection and data analysis, this can be an artificial division, with analytical insights occurring during data collection, and more data collection occurring during analysis (Patton, 2002; Basit, 2003). Similarly, coding is a developmental process throughout the whole analysis (Braun & Clarke, 2006). Patton attests to the iterative, integrative processes that are the nature of qualitative research.

In summary, regardless of technique or strategy used, analysis must be of the highest quality. Yin (2014) states that this is more likely if researchers remember to: engage with all the evidence; contend with all rival explanations; highlight the most significant aspect of the case; and use their own expert knowledge.

In Practice

As the questionnaires were completed, the large amounts of data required careful handling and analysis. SurveyMonkey can provide simple grouping and of closed questions, which was then analysed descriptively. Open ended questions were analysed for emerging themes, topics, threads and contradictions. This was done by using coloured notes and highlighters to code different themes (Patton, 2002), and rearranging data once new patterns

emerged. These themes formed the basis for the interviews, and were validated by the greater depth of explanation provided during interview.

For the interviews, data analysis was undertaken by reading and engaging with the files produced from voice to text software as soon as possible after the interview. The researcher transcribed the interviews herself, allowing her to be immersed in the data again (and again if necessary). Thoughts and ideas about each interview were also recorded in the researcher's reflective journal. Themes were identified and related back to themes from the questionnaire. Direct quotes and sections of text were identified in different colours (to represent themes) that would illustrate threads within the study. The discussion and conclusion was arranged according to the four core competencies of Interprofessional Practice (IPEC, 2011). This allowed for some generalisation and gave the research readability. The data was converted into tables, graphs, or narrative descriptions and displayed in the results chapter.

3.6. Ethical considerations

Theory

Ethical considerations in qualitative research must be based on what Munhall (1988) calls "a profound reverence for human beings and their experiences" (p. 150). A good case study researcher has integrity, accepts responsibility for his or her work, has professional competence, and strives for quality scholarship (Yin, 2014). Case studies are carried out in 'real' situations in which the participants have responsibilities and obligations with which the study may interfere. The researcher, too, may have obligations and create expectations. Because case studies are often 'close up' accounts, they may be more intrusive and involve reactivity more than quantitative methods (Patton, 2002). Therefore, ethical considerations in qualitative inquiry are of paramount importance.

Massey University's code of ethical conduct for teaching research and evaluations involving human participants (2013, p.4) details the major ethical principles as follows:

a) respect for persons;

b) minimisation of harm to participants, researchers, institutions and groups;

c) informed and voluntary consent;

d) respect for privacy and confidentiality;

e) the avoidance of unnecessary deception;

f) avoidance of conflict of interest;

g) social and cultural sensitivity to the age, gender, culture, religion, social class of the participants;

h) justice and equitability of participants.

In Practice

The research was assessed by the researcher and supervisors based on the Massey code, and considered low risk. The ethics committee was notified, and accepted our notification. Table 4 shows how potential ethical issues were addressed in the research.

Table 4: An outline of how potential ethical issues were addressed in the research

Ethical Issue	**Minimisation**
Respect for persons	Research appreciates the importance of respectful relationships with all human beings as at the heart of this research, which guide all interactions.
Minimisation of harm to participants, researchers, institutions and groups;	Low risk research unlikely to pose harm, however, participants informed they could ignore/skip questions is required.
Informed and voluntary consent	Letter of information to each participant, clearly detailing that participation is voluntary and they can withdraw at any time. Written consent required for interviews
Respect for privacy and confidentiality	Nature of research was on workings of IPP team, not the child. There was no requirement to identify the child. No names on questionnaires, pseudonyms used in reporting, and no contacts kept. Participants could complete questionnaire in privacy of own home or place of their choice.
Avoidance of unnecessary deception	All information was detailed on the information sheet and consent form. Methodology detailed, with appendices containing research instruments so participants could see validity and reliability of study
Avoidance of conflict of interest	Researcher did not use IPP teams which she was a member of. Using researcher as moderator was identified and evaluated.
Social and cultural sensitivity	Research and researcher aware of sensitivity and also requirements under Treaty of Waitangi.
Justice and equitability of participants	All those who wanted to take part in the research were able to, both questionnaire and interview.

3.7. Validity and reliability

Theory

It can be difficult to develop validity standards in qualitative research because of the need to incorporate the contradictory elements of rigour, subjectivity and creativity into the scientific process (Whittemore, Chase, & Mandle, 2001). Deciding which techniques are used will depend on the context, and they can be "variously employed, adapted, and combined for different purposes" (Wolcott, 1992, p. 27). By paying attention to issues of validity, reliability and generalisability, Mays and Pope (1995) argue that the integrity of qualitative research projects can be protected.

Qualitative validity involves determining whether findings are accurate, from the viewpoint of the researcher, the participant, or the reader (Creswell, 2014). Terms such as trustworthiness, authenticity, and credibility are used when referring to qualitative validity (Creswell & Miller, 2000). Validity strategies or tactics relevant to non-explanatory case study research (after Yin, 2014, and Creswell, 2014) are:

Triangulation. Using multiple sources of evidence that converge to establish themes are important to increase the construct validity of a study.

Member or key informant reviewing. Taking back to respondents the key themes or findings part way through the study to check for accuracy.

Replication. This can be achieved by putting together a case study database for use by future researchers. In this way, replication enhances reliability.

Establish a chain of evidence. Enabling readers to establish a chain of evidence from research questions to conclusion enhances construct validity.

Use thick rich description, to gain the greatest information from qualitative study.

Reflectivity. Yin (2014) suggests a way for researchers to avoid ignoring contrary evidence is to ask critical colleagues to examine the data and provide alternative explanations. Documented rebuttal of these contrary findings can reduce the likelihood of bias.

Qualitative reliability is concerned with the consistency of the research, to minimise errors and bias (Yin, 2014). In the past, case study research has been criticised for not

communicating enough descriptive detail about data analysis methods and assumptions and poor documentation of procedures (Mays & Pope, 1995; Yin, 2014). Therefore, one tactic for ensuring reliability is to carry out the research in such a way that an external auditor would be able to follow the step by step procedures and end up with similar results (Yin, 2014).

Qualitative generalisation is almost an oxymoron, given that qualitative research, especially case study research, is intended for the *particular* context of a specific case rather than the *general* (Creswell, 2014). However, Yin (2014) argues that multiple case study research uses replication logic, and studying of additional cases makes the original findings more robust and more readily generalised to new cases. Although, Yin makes it clear that this is dependent on thorough documentation of procedures and detailed protocols.

In Practice

Tactics used to demonstrate validity in this study follow Yin's (2014) and Creswell's (2014) recommendations. Triangulation was achieved by using multiple convergent sources of evidence from questionnaires and in-depth interviews. Member checking was used to check the write up of the findings and of the discussion. There is a clear chain of evidence whereby research questions have been formulated from a review of the literature, the findings link to these research questions, and conclusions link back to initial research questions. The research employs thick rich description so as to capture the greatest amount of information. Reflectivity was recognised by asking supervisors to examine the data for alternative explanations and then documenting arguments against these alternatives.

Whittemore et al. (2001) provide a list of techniques for demonstrating validity. This is shown below in Table 5 and has been adapted by adding a third column to demonstrate which techniques have been used in this study, and thus demonstrate rigour within the study.

Table 5: Techniques for Demonstrating Validity (after Whittemore et al., 2001)

Type of technique	Technique	Evident in this study
Design consideration	Developing a self-conscious research design	Yes
	Sampling decisions (i.e. sampling adequacy)	Yes
	Employing triangulation	Yes
	Giving voice	Yes
	Sharing perquisites of privilege	N/A
	Expressing issues of oppressed group	N/A
Data generating	Articulating data collection decisions	Yes
	Demonstrating prolonged engagement	Yes
	Demonstrating persistent observation	No
	Providing verbatim transcription	Yes
	Demonstrating saturation	Yes
Analytic	Articulating data analysis decisions	Yes
	Member checking	Yes
	Expert checking	Yes
	Performing quasistatistics	No
	Testing hypotheses in data analysis	N/A
	Using computer programs	N/A
	Drawing data reduction tables	Yes
	Exploring rival explanations	Yes
	Performing a literature review	Yes
	Analyzing negative case analysis	Yes
	Memoing	Yes
	Reflexive journaling	Yes
	Writing an interim report	Yes
	Bracketing	No
Presentation	Providing an audit trail	Yes
	Providing evidence that support interpretations	Yes
	Acknowledging the researcher perspective	Yes
	Providing thick descriptions	Yes

3.8. Limitations

Limitations within this research are listed below. These form part of the audit trail or procedural account, and must be documented for research quality and rigour.

- The sample may not be representative of the range of diverse views and practices in IPP teams within the education sector.
- There will be some researcher bias, as this researcher has more knowledge and experience in gifted education than special education. To overcome this, two case study write-ups were sent to participants for member checking.
- The IPP teams may not represent a cross section of all IPP teams working with gifted learners with multiple exceptionalities.
- Respondents may be concerned that the research is evaluative, and so portray their experiences more positively.
- Focus groups were planned, but not possible in practice. This means that understandings are channelled through the moderator, rather than being formed through focus group discussion. It also means that some contradictions between IPP team member answers remain unresolved.
- Not all education sectors are represented – there is no data from Kindergarten/early years centres, the tertiary sector, or from Kura Kaupapa Maori medium schools.
- The research may highlight other areas which cannot be a focus of this study

3.9. Summary

This chapter describes, explains and justifies the research design and methodology used to gather and analyse qualitative case study data on how IPP teams work to identify and cater for gifted learners with multiple exceptionalities. Interprofessional practice teams participated in an online questionnaire and some in further interviews. Validity, reliability and generalisability have been justified within the multiple case study design, and ethical considerations addressed. Possible limitations are also highlighted. Chapter 4 presents the results of this research.

CHAPTER 4

Results: Case studies

4.1. Introduction

This chapter and chapter 5 present the collated findings of a survey and subsequent interviews from interprofessional practice (IPP) teams on how they work to identify and meet the needs of gifted learners with multiple exceptionalities. These findings offer insight into how IPP teams conduct their work with gifted learners with multiple exceptionalities, and the characteristics that have an effect on this process.

Seven IPP teams responded to the survey; of those, three teams agreed to give interviews and four further teams gave additional detailed information via email interview. Specifically, the shared attitudes, knowledge, responsibilities and confidence of IPP team members, plus communication and teamworking skills of the team itself were investigated. Chapter 4 provides respondent information and a description of each case study or IPP team, and Chapter 5 synthesises the findings as emerging themes.

4.2. Respondent information

Table 6 below details the general demographics of each IPP team. This not meant to be a representative sample of the target population. All schools in the study were English medium with no Kura Kaupapa or bilingual schools choosing to participate. The aim is to explore the how and the why of practices in use in order to gain an insight into what is happening within interprofessional practice teams at the current time, which this sample enables.

Table 6: IPP team demographics

Location of IPP team	No. of Respondents from IPP team	Professionals involved	Stage of education	Type of school	Area
A. Otago	4	Class teacher RTLB Specialist teacher for G&T Parent	Primary/Intermediate	Integrated Co-ed	Rural
B. Auckland	3	Class teacher RTLB Parent	Primary	State school Co-ed	Suburban
C. Bay of Plenty	2	Class teacher SENCO	Secondary	State school Co-ed	Urban
D. Christchurch	2	Class teacher SENCO	Secondary	Integrated Single sex	Urban
E. Auckland	3	Guidance Counsellor Learning support person SENCO	Secondary	State school Co-ed	Urban
F. Auckland	3	Guidance Counsellor Assistant G&T coordinator G&T coordinator	Secondary	State school Co-ed	Urban
G. Auckland	2	G&T coordinator SENCO	Primary	Private Single sex	Urban

4.3. Case Studies

Case Study A

Interprofessional Practice team A operated within a rural area of the South Island and consisted of four team members: class teacher, RTLB, parent, and teacher of gifted children at a "one day school" type programme. At the time of the research, the team had been working over the past two years with an intermediate age student considered to be gifted with Attention Deficit Hyperactivity Disorder (ADHD).

Identification of the child as a gifted learner with multiple exceptionalities was not straightforward, as 'diagnoses' of giftedness and ADHD were carried out exclusively at different times by different professionals. The identification process as a gifted learner with multiple exceptionalities was set in motion when the child entered a gifted one day a week

programme in year 5. The teacher of the gifted programme advised the mother that his behaviours were not solely down to him being gifted. His mother stated:

"*The only time I was clear that he fit the 2E criteria was on the first day of the gifted withdrawal programme, where the teacher said I don't think he will benefit from this unless his hyperactivity and inability to focus are attended to, and that was the first time I had a context for his behaviour that wasn't just the overexcitabilities."*

The class teacher had never heard of the term 2E, and the teacher of the gifted programme said "*I don't know that the formal term 2E came up, other than we started using it when we accepted he had some issues with learning and other exceptionalities".* The mother supported this comment saying, "*Until then I had felt he was just gifted, and the diagnosis for ADHD happened in the same time frame, and so we didn't use that term (2E), but I used it because that is what I had read"*.

At the same time, the student moved to a new school, whose Principal referred the student to the RTLB service immediately. The mother felt that once the RTLB became involved, the process became clearer and more systematic, and the IEP process helped with clear goal setting. Previously, the mother had been unable to secure any support for her son, even though previous teachers had recognised there were some issues and tried to assist. The mother said it was made clear that the SENCO only dealt with ORS funded cases and as he was not eligible for this, there was no support available to help with behaviour management.

The teacher of gifted children explained the collaborative nature of their provision. "*My understanding was the classroom teacher set up the provision and the RTLB assisted her. I just came in and gave advice, really from the experience I'd had. I believe it was a sharing – where have you had success, and this is where I have had success and let's try and share."*

The team were in agreement that had the child been identified earlier as gifted with multiple exceptionalities, the outcome may have been more positive. *"I believe his successes would be greater today and his sense of self- worth far greater if we had got this right in the juniors. There is no question"* (teacher for gifted children).

"The team coming together was a reactive measure, not a preventative measure. It only came about because of the personal drive of the mother and the child's needs being extreme" (teacher for gifted children).

Case Study B

Interprofessional Practice Team B was located within the Greater Auckland area and consisted of three team members – the mother, the RTLB, and the class teacher. Only the parent included the educational psychologist as part of the team. The child was considered gifted with a specific learning difficulty (dyslexia). She was of primary age (Year 4) and at the time of the research the team had been working with her since the beginning of the year (six months).

Identification of the child as a gifted learner with multiple exceptionalities occurred when the child was assessed privately by an educational psychologist. A year prior, the child had been identified via the "special needs route" as possibly having some sort of learning difficulty. The mother said she had a *"gut instinct that something wasn't right so I did some research on the internet and felt there was some dyslexia there".* The teacher made a referral to the RTLB, which was seen as low priority by the service - a year later the student was still waiting to be seen. The mother felt strongly that she was being *"second guessed. I felt like I was the only one who could see the problem, and was constantly being told from school that there was nothing wrong and I was wasting my time"*. The mother reports that by this stage the child's anxiety levels were very high and she had significant social-emotional issues *"she just wasn't sleeping and she was up all night crying and screaming and the anxiety was through the roof and she wouldn't sleep in her own bed and we couldn't get her to school"*. She also reports that she herself was affected by the fact that the school could not or would not see what she could see. The mother then approached the doctor who suggested seeing an educational psychologist, and the subsequent report indicated the child was a gifted learner with multiple exceptionalities. *"I had never heard that term 2E before. I had only ever heard of dyslexia or autism and I didn't know it could be married with giftedness. I only heard that from the psychologist"* (mother).

The class teacher felt she would not have been able to identify the child as gifted with multiple exceptionalities as there was nothing concrete to pick up on. She reported that the previous year's teacher felt the child was struggling and not retaining any learning, but stated that *"within my room she is no different academically to a lot of the other children. You start seeing little things, but this one you couldn't really see things happening".* The parent concurred that it was not an obvious case.

Being on the RTLB's roster and having guidelines from the educational psychologist's report both acted as catalysts for provision. At the time of the survey in early May, provision was focussed on remediation, with the RTLB lodging an assistive technology application for an iPad to assist with writing. Both the RTLB and the teacher reported they would only use or recommend drill and practice with special needs learners, however, the mother reported that the child is doing the 'Lexia' programme, and said *"I do feel for her and I have to force her to do it. It must be so unstimulating for her and so basic"*. The teacher agreed that the child does not like worksheets for the same reason. The RTLB acknowledged that *"whilst the school don't have a deficit view of the child exactly, the mother is more interested in the bits she can do than the bits she can't, so I emailed some kind of national group to do with One Day School and handed all that information over to the mum".*

By the time of the interviews in mid-June, the classroom teacher explained that she was *"coming to terms with it all"* and had had a look on the Gifted Education website. *"I like the fact they said try to tap into the things she's good at rather than worry about the other*", and indicated that she is trying new things each week to find out what the child enjoys. However, the parent and RTLB do not necessarily see regular school as the place for gifted provision, with the mother saying *"the RTLB has talked to me about the One Day School but she doesn't know a lot about it and I'm a bit lost. I definitely want to nurture that side though".*

Case Study C

Interprofessional Practice Team C took part in the online survey only, hence the limited information available. It was located within the Bay of Plenty area and consisted of two team members – the gifted and talented facilitator and the SENCO. They indicated that whilst not part of the nuclear IPP team, the Dean, RTLB, and guidance counsellor surrounded them, "*to be consulted when required"* or *"according to need."* The child was of high school age at the time of research.

The two IPP team members were mainly in agreement that teaching strategies recommended for gifted children should also be recommended for gifted learners with multiple exceptionalities and for special need students. The only strategies the SENCO recommended solely for students with special needs were drill and practice, and workbook

activities. The SENCO also pointed out the importance of *"allowing any programme that motivates, extends, helps student make connections, delights*". The gifted and talented facilitator added another strategy of *'mentoring – teacher or peer".*

Case Study D

Interprofessional practice team D was located in Christchurch at an integrated secondary school for boys. The team consisted of two team members – the G&T coordinator and the SENCO, although like other teams, they indicated that there was a joint responsibility also between the class teacher, Head of Faculty, House Tutor and guidance counsellor to enhance learning.

The young person that this IPP team centred around had arrived at the school three years earlier in Year 11. He was considered gifted with Aspergers syndrome and had, according to the teacher, been badly bullied at his previous school. He was identified as gifted and as special needs by the school, although the approach was not a coordinated one. *"When I first met him, I had not had any prior experience with Aspergers nor was I involved in the gifted programme. At the time I was teacher in charge of Drama and it was suggested that as I 'was good at handling students with learning difficulties' that Drama would be a good subject for him."* The student insisted that he could not perform on stage and would not, so she did not push him. He was however interested in learning the technical elements of theatre, so the teacher taught him how to use and run the lighting desk for the upcoming school performance. The teacher said *"the most important thing for me with him at this stage was making him feel included and a valuable member of the class while building his confidence".* Because the student had difficulties getting his ideas written down, the teacher would often scribe for the student. The 'learning support ladies' were also used, and learning support was another place the student felt safe.

The following year, the student performed in the end of school production with success. By year 13, the teacher says "*we started off the year with absurdism and it was through this that myself and the rest of the class were starting to see the world through his eyes. Absurdism made complete sense to him and showed a depth of understanding that dumfounded myself and the entire class. I always knew he had a breadth of knowledge, but when it came to a class discussion, his ability to interpret Samuel Beckett's 'Act without*

words' in a way that showed a perceptive depth of emotional understanding in a way that has never been interpreted in any academic readings I've come across blew me away. I think at this point the relationships in the class changed again; it went from protection to respect".

This team are writing a new gifted policy which takes account of the school ethos and spiritual values, and is being developed with whole school consultation.

Case Study E

Interprofessional Practice team E was located in Auckland in a large high school and consisted of three team members – the guidance counsellor, SENCO, and Learning Support Person (teacher aide). At the time of the research, the team had worked with a student from year 9 to year 12 who was gifted with cognitive processing issues – *"difficulty recording ideas, memory concerns, and very disorganised"* (guidance counsellor).

The gifted learner with multiple exceptionalities within this IPP team had been identified through assessment procedures to get into One Day School in year 5. The guidance counsellor said *"he was definitely assessed as gifted first, but the inability to complete the courses at secondary level were more important in the last three years"*. Whilst the parent and RTLB had been the main advocates at primary school, the guidance counsellor took on this role at secondary level.

Provision was organised by the SENCO, who liaised with counsellors and teachers and organised learning support members. The guidance counsellor felt that the team shared a positive attitude and a *"willingness to deal with individual cases"*. The SENCO believed that sharing and communication were strong team enablers.

Case Study F

Interprofessional Practice team F was located in Auckland in a large high school and consisted of three team members – the guidance counsellor, gifted coordinator and assistant gifted coordinator. The student being supported was gifted with processing speed and sequencing deficits.

Identification was set in motion by the English department who saw that there was a discrepancy between his standardised test scores and his work output. The teachers suggested to the gifted coordinator that the student might be gifted with multiple exceptionalities. The G&T coordinator and SENCO met with the parents to advocate for testing (by an educational psychologist). The gifted coordinator said *"it took some time to get the parents on board because they felt like he was not doing his best rather than there was an issue there"*. The gifted coordinator met with the parents after assessment to draft information and agree on recommendations for teachers. There is also a system of checking reports and grades, keeping in touch with the Dean and interviewing the child once a term. Contact with parents is as needed and *"if things are sailing, not particularly frequent"*.

The assistant gifted coordinator felt that the team "*trusted one another, made themselves available to chat and respected each other's experiences"*. She thought a shared office space would enable more shared information.

Case Study G

Interprofessional Practice team G was located in Auckland in an independent girls school and consisted of two team members – the SENCO and the gifted coordinator. At the time of the research, the team had been working with an 8 year old student who is gifted with Specific Learning Difficulties (dyslexia).

Identification of the gifted learner with multiple exceptionalities had initially been through learning support where she had been receiving support for literacy difficulties. Her older sibling had been assessed by an educational psychologist as a gifted learner with multiple exceptionalities, and whilst working with the older sibling, the gifted coordinator was able to encourage the parents to have the younger daughter tested. The school also identified the child through a discrepancy between high listening PAT test and a low comprehension and vocabulary PAT.

Catering for the needs of the child involved what the gifted coordinator called *"a number of perspectives"*. The gifted coordinator stated *"we don't view gifted education and learning support as separate categories- rather, we are looking for diversity"*. The student was receiving literacy support as well as being included in enrichment programmes.

Provision in this IPP team also takes account of the social and emotional needs of gifted children, with the G&T coordinator providing one on one support to work on self- efficacy.

4.4. Summary

Chapter 4 describes the workings and thoughts of each interprofessional practice team. By describing the journey of the interprofessional practice team surrounding the student, respondents were able to give insight into the processes involved within each context. This rich case study description contributed to the next chapter, where results were able to be organised into themes emerging from these descriptive accounts.

CHAPTER 5

Results: Emerging themes

5.1. Introduction

This research sought to find out how IPP teams work to identify and provide for gifted learners with multiple exceptionalities. The following research questions guided this study, and are based on the core competencies for interprofessional practise (IPEC, 2011):

1. How do the differing values of various IPP team members affect identification and provision for gifted learners with multiple exceptionalities?
2. What knowledge is there of roles and responsibilities within the IPP teams, and how much confidence is there to identify and provide for gifted learners with multiple exceptionalities?
3. What aspects of interprofessional communication assist/ do not assist in identification and provision for gifted learners with multiple exceptionalities?
4. How does professional development in the area of teamwork (collaboration, consultation and communication, team roles, conflict resolution) affect identification and provision for gifted learners with multiple exceptionalities?

The interprofessional practise core competencies of shared values, roles and responsibilities, communication and teamwork were used to guide the survey questions and subsequent interviews to form the case studies. The results are presented according to themes emerging within this framework.

5.2. Shared Values

The first section was around shared values and beliefs. The main purpose was to explore how IPP team members felt about gifted students, and whether teams shared similar beliefs about the place of gifted learners with multiple exceptionalities within inclusive education. Specifically, IPP teams were asked about their beliefs regarding access to services for gifted learners with multiple exceptionalities, and whether they agreed or disagreed with certain statements about meeting the needs of this population of learners.

Access to services

When asked what services gifted learners with multiple exceptionalities should be allowed to access, all seven IPP teams shared between their members a belief that access to the full range of services suggested in the survey was required. These included services specific to gifted learners (e.g. one-day-a-week programmes, enrichment), services for special needs (e.g. RTLB, Ongoing Resource Scheme (ORS) funding, literacy support), and services available for all students that provide for exceptionalities (e.g. Correspondence School, competitions, mentoring). There was a willingness across all IPP teams to accept that educationally, 'one-size -does-not-fit-all' and that it is necessary to call on services which best individualise the learning for the student.

"It so depends on the level of difficulty and the child's strengths -we need to have all available and just select the most useful" (class teacher).

"I believed there was an acceptance that he wasn't going to fit the norm and there was a willingness to set up an individualised programme which is really the main step" (teacher of gifted programme).

There was variation, however, *within* IPP teams about the services that should be available to gifted learners with multiple exceptionalities. In case study B for example, the parent focussed solely on services that would support the child in areas of remediation. The class teacher in the same team focussed on strategies to support areas of strength (extension programmes) as well as areas of support, however the list of services was small and not comprehensive. The guidance counsellor in case study E supported all services being available to gifted learners with multiple exceptionalities, whereas the learning support person supported a small number of services only.

Whilst there was a clear direction amongst respondents towards allowing a full range of services to be available there was some concern expressed that in practice, schools were not always keen to provide the everyday supports a gifted learner with multiple exceptionalities might need to succeed. One example given from case study A was of not always reminding a child to take his medication, partly because they knew he was cognitively capable of doing the task.

"I believe it was harder for him because they knew he was capable, so there were times that they didn't understand that his difficulty genuinely stopped him, and he wasn't

being belligerent. Because he could be belligerent, and the difficulty was defining when he was belligerent and when he was genuinely inhibited" (teacher for gifted children).

Values and understandings about gifted learners with multiple exceptionalities

In order to ascertain knowledge of gifted education and espoused understandings around gifted education, participants were asked to agree or disagree with a set of statements related to gifted learners with multiple exceptionalities. All IPP team members either agreed or strongly agreed that gifted learners with multiple exceptionalities need to work with like minds for at least some of the time. All agreed that they can be underachievers, but disagreed or strongly disagreed that children who are 'below' on most school measures must have their needs met before support is given to those who are on track or 'above'. They also disagreed or strongly disagreed that it is unfair to give extra support and funding to gifted students when that support could be used for special needs students, and disagreed or strongly disagreed that only gifted children who perform in an academic area should have gifted provision made available to them.

However, when asked to agree or disagree with the statement 'gifted learners with multiple exceptionalities need challenge first, then accommodation, then remediation', almost two thirds of participants agreed, and one third disagreed or did not know. When asked to agree or disagree with the statement 'gifted learners who are performing above average are being well catered for by the school', a third of participants agreed with this statement, two thirds disagreed, and one person did not know. In both cases there was no pattern observed between answers and professional specialism, i.e. not all RTLB answered the question the same way. There was limited shared understanding across specialisms on how to actually provide appropriate learning experiences for gifted learners with multiple exceptionalities, and how to measure the effectiveness of provisions.

The IPP team in Case study D provided challenge as a priority for the student, with accommodation and remediation also offered as illustrated below. The drama teacher states:

"I decided that he was capable of performance and suggested that he may like to consider it. He loved it and eventually performed Shakespeare. He did an incredible performance in front of an audience and absolutely knew how to play the audience."

In terms of accommodation the teacher said *"he really struggled with committing his thoughts to paper, so I spent one-on-one time with him acting as his reader writer".* Accommodation also included planning for NCEA requirements. *"We found that the pressure of exams made him feel quite vulnerable. So in Year 13 we decided it was best to concentrate on internal assessments, and have him achieving his best in his subject areas of interest".* In terms of remediation *"the student spent a lot of time in the learning support area because this was a safe place for him".* Development of an IEP meant home and school could follow his progress in a structured fashion.

Need for social and emotional support

There was recognition in four IPP teams that social and emotional behaviours also required attention and intervention. The parent in case study A felt that *"the RTLB really addressed the social and emotional wellbeing of the child"* and that high expectations by the teacher, and a belief that the child could do challenging work was a key strategy for provision. The parent also indicated the role that whole school ethos played *"I just think that the ethos shone through that every child is valued, and every child has warts and every child has things that shine. I can't say enough about how the school gave him back his sense of worth".*

In case study C, the gifted and talented facilitator highlighted the socio-emotional risks of underachievement and disengagement in their definition of gifted learners with multiple exceptionalities. Case study G recognised the unique socio-emotional needs by providing one-to-one self-efficacy training with the student. This training included things like goal setting, understanding how to manage overexcitabilities, and organisational tools. In case study D, the teacher recognised the importance of peers in social and emotional education.

"*In all honesty his success in the subject came down to the nature of the relationships that developed in the class. Most of the students in this class would be classified gifted across a range of subject areas and they were definitely very talented performers. They developed a protective bond with him and would not stand for any bullying."*

Not all IPP team members recognised or understood social and emotional needs. For example, one class teacher made clear that she didn't understand how she could help in areas that she did not see as to do with learning.

"Her behaviours are extreme at home and I'm thinking, how is this the schools problem? That is what we found difficult. Outside of school."

Summary

The main values evident in this section were the recognition that accessing a wide range of services is necessary to individualise learning according to the needs of the gifted learner with multiple exceptionalities. However in practice, there was some evidence that students may not have been given support which allowed them to succeed because their high cognitive ability meant they "should have" been able to do it by themselves. The majority of IPP team members also recognised that gifted learners with multiple exceptionalities require additional support on an equitable footing with special needs students. However, findings show that IPP members were unclear whether or not performing above the norm academically was an indication the child was being well catered for, and IPP team members were also unclear about the need for a strengths based, challenge first approach to provision. Just over half of the IPP teams made reference to the importance of addressing socio-emotional issues.

5.3. Roles and responsibilities

This section investigated how much IPP team members understood their own role and the roles of others in the team, specifically in terms of knowledge and confidence. Themes emerged around formal training of team members, knowledge of own role and knowledge of other roles within the team, definitions of gifted learners with multiple exceptionalities, responsibility, how identification and provision occurred, and confidence to identify and cater for the child's unique needs.

Formal training

Three IPP teams had gifted coordinators (or teachers of gifted children) who had received formal education in gifted children, yet not in gifted learners with multiple exceptionalities. Five IPP teams had gifted coordinators who had not completed any formal study in special needs education. Special Needs coordinators had the greatest spread of formal study across the learning profiles, with SENCO from two IPP teams receiving formal study in all three learner profile areas, and a further SENCO receiving formal study in special needs and gifted education. RTLB had completed formal study in Special Needs education, but not in gifted education or about gifted learners with multiple exceptionalities. Parents and classroom teachers had no formal training in gifted education, special education, or gifted learners with multiple exceptionalities. It is also noteworthy that three gifted coordinators had no formal training in any of the three areas either. Overall, there was limited evidence of specialists being educated outside of their specialisms, and in the case of gifted coordinators, being educated *within* their specialisms.

Knowledge of own role and other roles within the team

Team members reported a lack of knowledge within the team about gifted learners with multiple exceptionalities.

"This whole 2E area is a minefield, and I have had to educate myself" (parent).

" I'm trying not to say I am flummoxed, but I am challenged because I have never worked with a 2E child before – in the normal course of events RTLB would be dealing with learning or behavioural problems" (RTLB).

"I have never had a child in my class with this label before" (class teacher).

On a positive note, during interviews, many participants expressed an interest to find out more. One teacher wrote *"I think my experience with him, actually leads me to question what we do or don't understand about Aspergers or ASD …. I wouldn't mind studying this further".*

Definitions

There was no standard definition of gifted learners with multiple exceptionalities agreed on across IPP teams or within teams. Only members of case study D agreed on their definition together. Other IPP team members wrote:

"A gifted student whose abilities are masked or defined by a disability, condition or impairment" (teacher).

"Gifted traits can be masked by the exceptionalities – a child may appear to be performing to the level of age peers, but is actually underperforming given his/her giftedness – a recipe for frustration for the child and the teacher" (parent).

"Someone who is gifted in a range of different areas" (teacher).

Who has primary responsibility?

When asked individually who had primary responsibility for the gifted learner with multiple exceptionalities within the IPP team there was no consensus between IPP team members, except in case study D. Typical responses mirrored those from Case study B, where the class teacher said *"I don't think we named anyone for that, there was no one specific"*, the parent said *"RTLB",* and the RTLB felt that the responsibility must lie within the school, stating *"the teacher has a daily responsibility, and the SENCO has a special needs responsibility, but I would say I am just the facilitator and it is a matter for the whole school – I don't want to take over the whole thing".* Only case study D concurred that it was a joint responsibility. In the other six IPP teams, members nominated someone other than themselves to be responsible.

Identification of gifted learners with multiple exceptionalities by the IPP team

Table 7 shows the route or journey of identification of the gifted learner with multiple exceptionalities. For five of the six IPP teams for which there is data, the parent raised initial concern. Data show that students can be identified by the 'gifted route', as in case studies A and E, or by the 'special needs route', as in case studies B and G, or by both (case study D and F). Exceptionalities other than giftedness have been identified as ADHD, dyslexia,

Aspergers, unspecified specific learning difficulties, processing and sequencing deficits, and literacy difficulties. As far as being identified as a gifted learner with multiple exceptionalities, case study A used the term '2E', led by the parent, as that is what she had read in the literature. In case study B, F, and G, educational psychologist reports identified and used the term '2E' or 'twice exceptional', and in case study E, the guidance counsellor (who also had postgraduate qualifications in gifted education) led the team to use the term 'twice exceptional'. Case study D used the term Aspergers to explain the student's learning profile as a gifted learner with multiple exceptionalities. No class teachers had instigated the use of any term that would indicate multiple exceptionalities.

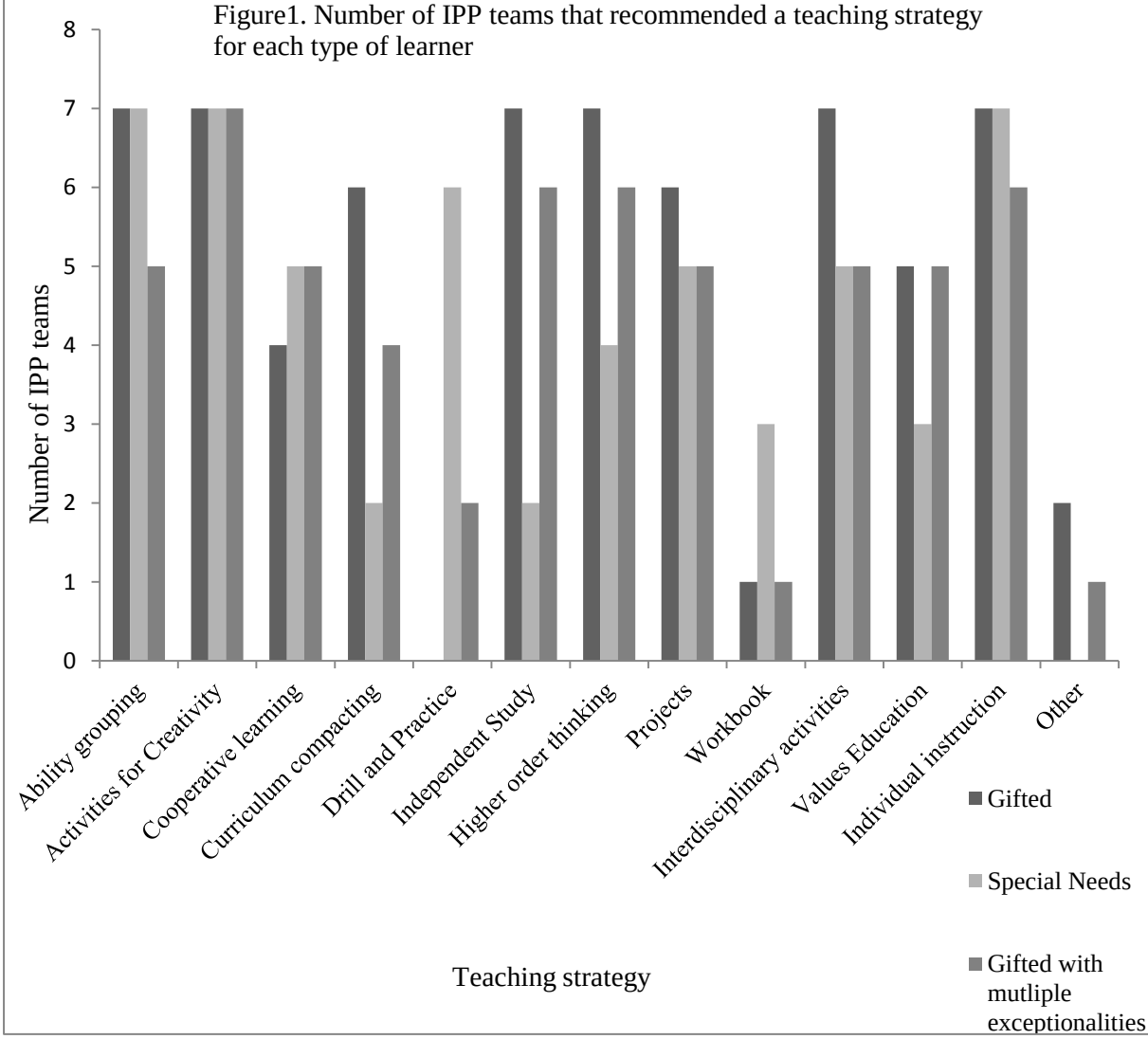
Table 7: Identification route of the gifted learner with multiple exceptionalities

IPP Team	Initial concern raised by whom	Which exceptionality first identified	Other exceptionalities	Who identified the child as a gifted learner with multiple exceptionalities?
A	Parent	Giftedness. Confirmed by private educational psychologist assessment using WISC 1V	ADHD. Diagnosed by child psychiatrist	Never done – the two were exclusive. Parent started using term 2E from literature she read herself
B	Parent	Dyslexia	Giftedness. Diagnosed by private educational psychologist assessment using WISC 1V	Educational psychologist report. Used term 2E. IPP team members never heard term before
D	Parent/teacher	Aspergers	Giftedness	No coordination of both exceptionalities at first, but individualised programme based on student need. Drama teacher
E	Parent	Giftedness. Diagnosed by private educational psychologist using WISC 1V	Specific learning difficulties at high school. Identified by SENCO and guidance counsellor	SENCO and guidance counsellor
F	Class teacher	Giftedness and processing speed deficits at same time. Diagnosed by private educational psychologist using WISC IV		Class teacher right from beginning
G	Parent, SENCO	Literacy difficulties	Giftedness.	G&T coordinator encouraged parents to have assessment with educational psychologist. Used term 2E

Teaching strategies/provision

IPP team members were asked to nominate which teaching strategies they would use or recommend class teachers use for gifted students, special needs students, and gifted students with multiple exceptionalities. Figure 1 shows how many IPP teams used or recommended each strategy.

Figure1. Number of IPP teams that recommended a teaching strategy for each type of learner



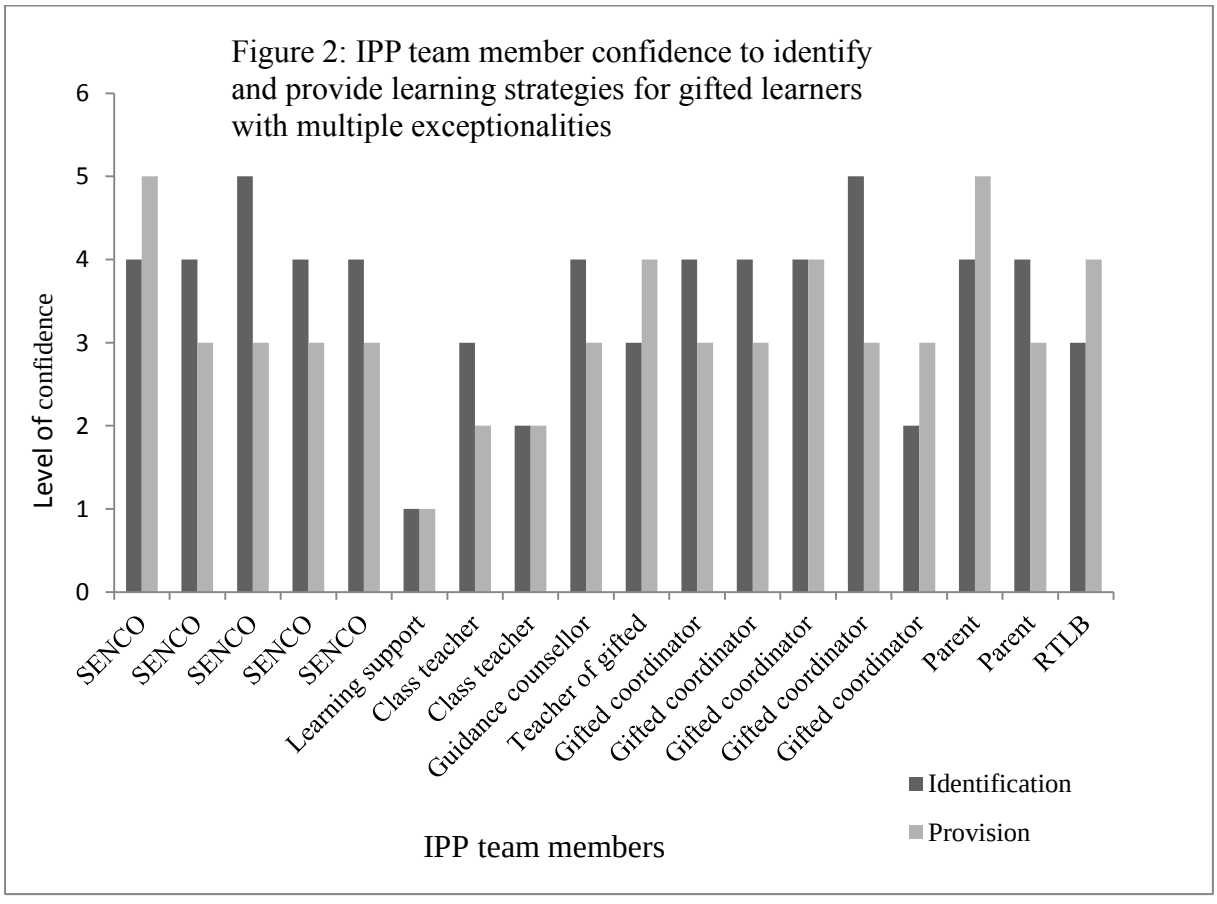
IPP teams were mostly in agreement that strategies used for gifted students should also be recommended/used for gifted learners with multiple exceptionalities. In contrast, there were a number of strategies, such as drill and practice, that were recommended for special needs students but not for gifted learners (with or without multiple exceptionalities), and vice versa. This is important if the gifted learner with multiple exceptionalities has been

identified via the 'special needs route'. Only one IPP team (case study C) considered all teaching strategies appropriate for all types of learners and therefore recommended their use for gifted students, special needs students and gifted learners with multiple exceptionalities.

One IPP team (case study G) also recognised that gifted learners with multiple exceptionalities are a unique subset of learners, not an amalgamation of gifted and special needs students. They stated that any strategy for provision *"still needs to be designed for the student e.g. ability grouping in reading for a gifted/dyslexic based on a student's comprehension rather than their written output or reading fluency".*

Confidence to identify and recommend provision for gifted learners with multiple exceptionalities

Figure 2 shows the confidence level that individual IPP team members reported when asked to identify, or meet the needs (provision) for gifted learners with multiple exceptionalities.



All SENCO's, four out of five G&T coordinators, the guidance counsellor and parents felt confident or very confident to identify gifted learners with multiple exceptionalities. Contrastingly, class teachers report poor and average confidence, and RTLB reports average confidence in identification. Confidence to identify gifted learners with multiple exceptionalities is noticeably greater than confidence to provide or recommend strategies to meet their learning needs. Four out of five SENCO, and four out of five G&T coordinators report only average confidence to cater for student needs. Both class teachers report poor confidence levels. One class teacher said *"it was just trial and error with him, and finding out his interests through conversations with his mum"*.

Summary

There was a lack of formal training within IPP teams on gifted learners with multiple exceptionalities. Whilst many special education staff were upskilled in gifted education, the opposite situation – gifted educators with knowledge and skills around special education, happened far less frequently. There were no gifted coordinators who had received any formal training in either gifted learners with multiple exceptionalities or in special needs. There was a strong feeling openly expressed that IPP team members did not have enough knowledge themselves or within their team to be able to meet the needs of gifted learners with multiple exceptionalities. However there was also a sense of curiosity and an interest in finding out more displayed by many respondents.

Definitions of gifted learners with multiple exceptionalities showed great variation, with some respondents giving an accurate holistic definition, to those who focussed just on academic ability, or focussed mainly on the learning difficulty, or were plainly inaccurate in their definition.

The majority of IPP teams had not agreed on a person who had primary responsibility for the gifted learner with multiple exceptionalities. All IPP teams except one gave conflicting answers to this question.

Students were identified either through the gifted route or the special needs route, and that it was the parent who raised the issue initially. Twice exceptionality was usually confirmed by a private educational psychology assessment, although it this terminology was not known or used by most of the IPP team members. A wide range of exceptionalities other than giftedness was documented.

The majority of IPP teams agreed that teaching strategies used for gifted learners should be used for gifted learners with multiple exceptionalities. However, respondents did not often use or recommend strategies intended for special needs learners when working with gifted learners, with or without multiple exceptionalities.

Confidence to identify gifted learners with multiple exceptionalities was markedly higher across IPP team members as a whole than the confidence to cater for their learning needs. Class teachers did not feel confident at either identification or provision.

5.4. Communication

The third series of questions looked at interprofessional communication. The major purpose of this section was to better understand the ways IPP teams communicated between themselves, and what communication methods may have acted as an enabler or a barrier to interprofessional practice. Dominant themes that emerged in response to these questions were the lack of whole team meeting (including the role of the parents, and the role of the health sector within the IPP team and educational psychologists), time constraints (including use of technology, funding constraints, and shared space), terminology, and access to documentation.

Table 8 shows variation in how often IPP teams (as identified by their members) met together when identifying the gifted learner with multiple exceptionalities, and when working out how to cater for their needs (provision). As the table shows, whilst four teams met together (some frequently) to discuss identification, three teams never met all together for this reason. In terms of discussing provision, the majority of IPP teams met once or twice, however two teams did not meet all together.

Table 8: Frequency of whole IPP team meetings

	Team A	Team B	Team C	Team D	Team E	Team F	Team G
Identification Meeting							
Never	x	x				x	
1-2 times			x				
3-5 times				x	x		X
Provision Meeting							
Never	x					x	
1-2 times		x		x	x		
3-5 times			x				x

The role of parents in the IPP team

Parents were considered part of the IPP team in only two out of the seven case studies. Some teams were unsure whether the parents were part of the team or not, and therefore their role within the team lacked clarity. In case study B, although all participants thought the initial meeting was very good, the team have not met together since. The teacher meets with the RTLB every week to *"talk about what I'm trying in the classroom. Mum not so much. I wouldn't know how she's (the child) getting on at home as mum doesn't come and see me, but RTLB has talked to her"*. Case study E reported that the school teachers met as a team, although it was difficult to maintain a positive attitude with the parent. It is worth noting that no IPP teams indicated that the student was part of the IPP team.

Limited communication with health sector/external agencies

Only one person across the IPP teams considered the health sector part of the team. In case study A, the parent was clear that she had made the psychiatrist aware the child had tested in the gifted range, however there had been no observation or contact with the schools other than for the initial behaviour rating scales questionnaire. The teacher of the gifted withdrawal programme reported that she had never communicated with the health sector.

In case study B, only the parent considered the health sector part of the team. The child was receiving support from a clinical psychologist, however the teacher felt that there was no communication or sharing. *"You fill in all this stuff and send stuff off but you never*

hear back. They never talk to me and then the child comes back into the class but you never hear anything. You just fill in a form or a rating scale and that's it." Although not necessarily part of the nuclear IPP team, neither the RTLB or the class teacher understood the educational psychologist report fully. The teacher in particular found the report difficult to decipher without any follow up or communication from the psychologist. *"This big report arrives on my desk and I sat down with the RTLB and I'm like, What? Pardon? The words in there, I mean what do half of them mean?"* Similarly, case study F felt that they did not see the educational psychologist as part of the team. Although the educational psychologist discussed reports with the parents and answered teacher's questions *"she's not particularly involved in planning how we respond to the areas of need. We would like to be able to work more closely but due to her time and location it's really hard"*.

Time to communicate

Many participants felt it difficult to find the time to meet together as a team. One teacher stated *"to find that time was near on impossible, it meant three or four people had to do major juggles to make it happen. And if it's not easy it won't happen and won't happen regularly".* Lack of shared space and lack of funding were also indicated by respondents in case studies A, F and C as barriers to meeting all together. Both class teachers said that preparation for IEPs and attending meetings was done on top of other work, and that lack of time was a barrier to effective communication. *"It takes about 2 hours to do an effective IEP and then the prep for that – having release time would help"* (class teacher).

Use of technology to aid communication

IPP teams were resistant to, or had not considered using technology (such as Skype) to aid communication. One parent felt that she may have used Skype later on in the process, but *"initially it was very important in terms of trust to be in the same room and building for support"*. The teacher for gifted children felt that Skype may have helped the team find some time, the lack of which she felt was the biggest issue, but had not used it. One of the RTLB felt that face to face meetings were crucially important to gauge body language and other cues. One of the class teachers stated she was open to using Skype, but had not.

Terminology

Terminology was not used consistently across the IPP team. In case study B the mother stated that the RTLB used the term gifted or 2E interchangably. The teacher and

RTLB took the term ‘exceptionalities’ to mean exceptional in ability, as in being gifted *“I said to the RTLB that you can certainly see what she struggles with, but what is she exceptional about?”* whereas the educational psychologist was using exceptionalities to indicate domains outside the norm – either gifted or special needs. In case study D the diagnosis of Aspergers was used to explain the child was gifted with multiple exceptionalities without further denoting this.

Accessing written school documentation

IPP teams were asked whether they had accessed policy documents, including mission statements on gifted learners with multiple exceptionalities. Four out of seven IPP teams did not access any policy documents on gifted learners with multiple exceptionalities. Of the remaining three teams, only case study D indicated that both members of the team had accessed policy documents. Of the other two teams, only the SENCO had accessed policy documents, but not the G&T coordinator. When asked why they had not accessed any policies, the most common response was that respondents did not think there were any, so they did not look.

Summary

Four out of seven IPP teams met regularly and frequently for both identification and provision for gifted learners with multiple exceptionalities. The other three IPP teams never met all together when working together. It was not clear whether parents and whanau were part of the IPP team, and there was no acknowledgement of the health sector being part of the interprofessional practice team. There was also no indication of the student being part of the IPP team. Respondents indicate that either it was not necessary to meet as a full team, or that it was not possible to find time to do so. Although some IPP team members expressed an interest in using technology to overcome this time issue, no team used Skype or Google Hangout or other technology to enable meeting all together. Terminology was not used consistently within some IPP teams. Finally, the majority of IPP teams did not access any school based documentation on gifted learners with multiple exceptionalities.

5.5. IEPs

An Individual Education Plan (IEP) is a written plan, developed collaboratively by all that know and work with a student that sets out a student's goals and identifies the ways to help the student achieve those goals (Ministry of Education, 2013). They may include: reasons for IEP; specific areas of ability and concern; outlines of measureable actions; responsibility; progress monitoring; and timeframe (Niederer, 2013). Thus an IEP is a process as well as a product.

IPP team members were asked how confident they felt during the IEP process for gifted learners with multiple exceptionalities. SENCO and RTLB reported good confidence to instigate, run and participate in IEPs. Most class teachers and G&T coordinators also report confidence to instigate and participate in an IEP process, although they felt less confidence to run one than their special needs trained counterparts. Parents report less confidence with any part of the IEP process than the education professionals. All IPP teams had carried out a formal IEP process for the gifted learner with multiple exceptionalities except for IPP team B.

Parental involvement and understanding of an IEP

Parents were not sure of their role and rights when it came to an IEP. The parent from case study A said *"I asked for an IEP because I felt that it was a bit too ephemeral. The RTLB was observing the teacher and giving her support but I felt it wasn't enough for me"*. A formal IEP meeting occurred between the RTLB, the class teacher and the parent *"I was much happier when there was a specific education plan. It worked much better when things were identified and strategies were put down, and we could say let's follow up at certain period*".

IPP teams attested to the importance of the IEP and IEP process. Case study A felt that having an IEP from the start would have helped. The teacher for gifted children felt that this would have avoided the child being labelled naughty. The parent felt that asking for an IEP *" probably triggers the whole process and makes it real. It means there is something to go back and look at and see goals and evaluations. It absolutely would make a difference".* The parent was concerned that parents do not know they can call for an IEP. *"It was only after going to the States that I realised I could ask for one. Looking back why did I not ask for*

that before?" When asked about an IEP, the parent from case study B said *"an IEP? What is that?"*

Summary

IEPs were used for students in six out of the seven IPP teams. Special needs trained professionals report a higher level of confidence to facilitate an IEP than G&T coordinators and class teachers. However, G&T coordinators and class teachers were confident to call for and participate in IEPs. Parents reported being unsure of their rights and having little knowledge when it comes to IEPs. IPP teams believed that having an IEP from the start is important and makes a crucial difference to the outcomes for gifted learners with multiple exceptionalities.

5.6. Teamwork

This section was concerned with finding out how interprofessional practice teams saw themselves in terms of their identity as a team. Members of IPP teams were asked whether they had received training or professional development in collaboration, consultation, conflict resolution, group roles or group processes. Participants were asked to describe their thoughts and feelings about the development of the team surrounding the gifted learner with multiple exceptionalities to determine how the team was defined and how it worked.

As detailed in Figure 3, participants who had come through the "special needs training route" had more training in teamwork competencies than those who had come through the "gifted education training route". Parents had no training in any of the teamwork competencies, and class teachers had limited training. Those within gifted education had limited training. The specialists in special education areas, such as SENCO and RTLB, had clearly received the most comprehensive teamwork training across the five teamwork skill areas.

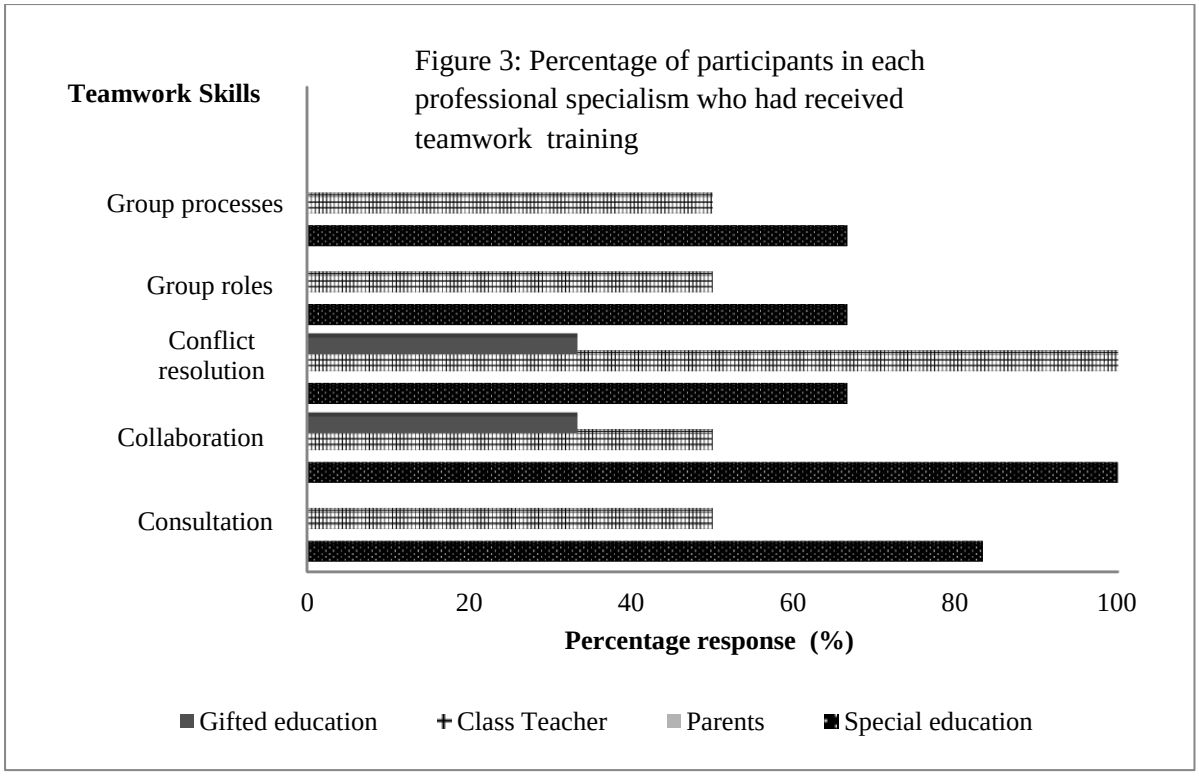


Figure 3: Percentage of participants in each professional specialism who had received teamwork training

The teacher of gifted children in case study A thought that having some formal teamwork training would have helped *"in every area of education. I don't think it is a 2E thing, I think it is a weakness in our system that an extensive amount of management skills are missing from the system"*. The teacher did feel that the team benefitted from the training the RTLB had had in this area, saying *"she was able to make every person feel like she was on their side and I don't think anyone else was able to do that".* The parent in case study A also felt the RTLB *"was good at being non-threatening and she did validate each person so they felt secure and able to contribute and she was highly skilled in that area".* Similarly, the class teacher in case study B stated that *"she (RTLB) facilitated the first meeting and she said who would do what and it was all colour coded. She lets you know where she is up to and you're not left in the dark. It is all quite systematic".* The parent agreed that the RTLB was very good at keeping in touch and following up.

IPP team E felt that the way they worked *"is a standard part of the way of working at the college"*. The guidance counsellor felt the school fortunate in having a very clued up SENCO person who calls on expertise from others in working with students with exceptional needs.

Teams expressed a feeling that they did not see themselves as a team. *"You keep using that word team and my initial question was-what is this word team and what team are*

you talking about and who are these people?" (teacher). The teacher emphasised that everyone worked together to try and help the child, but the concept of team was not there. The parent supported this feeling, saying that she felt no sense of a team at the beginning of the process, *"but through regular meetings and seeing that there was a real commitment to support, I think that we definitely felt like a team at the end"*.

One participant from case study F thought the team identity may not have been assumed by all team members. *"I have a close working relationship with my colleagues and I see us as working together, but I am realising through my conversations that maybe my colleagues don't! This is clearly an area for future development."*

Case study D felt that teamwork was crucial from policy development stage, and used a team approach to develop the gifted and talented policy. They stated the importance of senior management as stakeholders within this process.

"*It was really important to me that a committee of willing teachers from each faculty including learning support, ESOL, and the guidance councillor work as a team to develop the GATE policy……this has been a huge undertaking and if there wasn't a team approach or support from senior management, this would have been impossible. It's by no means perfect but definitely a work in progress!"* (gifted and talented coordinator).

5.7. Summary

Professional development in collaboration, consultation, conflict resolution, group roles and group processes was more consistently evident for RTLB and for SENCO, whereas for gifted and talented coordinators, class teachers, learning support, parents and guidance counsellors, it was patchy and ad hoc. IPP team members commented that it was evident that RTLB and SENCO had the skills to be able to keep the team together in ways that were not mentioned for other members of the team. Teams also believed that they did not see themselves as a team, and had not formalised the relationship, however there was a belief by some teams that they were working in ways that would identify them as a team.

This chapter has detailed the responses of the seven IPP teams and their members involved in the research. Emerging themes are related to the interprofessional practice core competencies of shared values, roles and responsibilities, communication, and teamwork. The following section discusses these findings in relation to the literature.

CHAPTER 6

DISCUSSION

6.1. Introduction

Gifted learners with multiple exceptionalities are considered to be a vulnerable school population (Silverman, 2007; Hill, 2010). If they are not recognised as a unique population of learners and offered teaching and learning strategies that meet both their academic and socio-emotional needs, the risk of underachievement is high and pervasive (Moon, 2002). New Zealand research shows that class teachers have limited knowledge and confidence to correctly identify and cater for the learning needs of gifted children with multiple exceptionalities (Chapman & Tunmer, 2000; Sturgess, 2004). Therefore, a collaborative taskforce is necessary – a task force who take a multidimensional view, and who individualise a plan for the gifted learner with multiple exceptionalities (Fetzer, 2000; Landrum, 2000; Nielsen, 2002; Rogers, 2010). Whilst international literature supports this multidisciplinary approach to meeting the needs of these students, there is little research within New Zealand on how these multidisciplinary (or interprofessional practice) teams work to identify and provide for the gifted learner with multiple exceptionalities.

A multidisciplinary team, or interprofessional practice (IPP) team, requires development of certain core competencies to be effective. According to the Interprofessional Education Collaborative Expert Panel (2011), these competency domains consist of values and ethics, roles and responsibilities, interprofessional communication, and team work. Developing effective teams through these competencies should create a more child centred, effective, efficient and equitable education for gifted learners with multiple exceptionalities. IPEC make it clear that *how* delivery occurs is as important as *what* delivery occurs. This chapter discusses the results of the study as they relate to the core competencies of interprofessional practice. Findings related to IEPs, both as process and product, are discussed. It will explore themes and possible relationships between the core competencies, the experience and perceptions of the interprofessional practice team members, and the theory and research related to effective identification and provision for gifted learners with multiple exceptionalities.

6.2. Values and ethics

In order for a team to work collaboratively around a student, shared values must develop within the interprofessional practice team, and there must be a culture of mutual respect (IPEC, 2011). Specifically in this case, teams working with gifted students with multiple exceptionalities must share values about inclusive education as a process to meet the needs of diverse student populations, rather than inclusive education being used as a synonym for special education (Kearney, 2013). Historical developments within gifted education and special education in New Zealand have meant that the two sectors are often separate and segregated, with special educators unable to access information and knowledge about gifted learners, and similarly gifted educators unable to access inclusive research, policies and practice (Riley, 2013). This means gifted learners with multiple exceptionalities may find it difficult to access the continuum of provisions that they need.

In responding to the research, IPP teams clearly indicated the importance of individualising and personalising the student's learning, suggesting that the widest range of services should be made available to the gifted learner with multiple exceptionalities, according to their specific needs. All IPP teams recognised that gifted learners with multiple exceptionalities require additional support, and supported this on an equal footing with special needs learners. There was no indication that special needs students should have their needs met before resources or support are given to gifted learners. This indicates an appreciation of gifted learners with multiple exceptionalities as part of inclusive education, in terms of equitable access to services. However, some respondents believed that there was a difference between beliefs and practical application, so that gifted learners with multiple exceptionalities were not always able to access support and services they needed to succeed on an everyday basis. Of course, this may be reality for any student with special needs, however for gifted students with multiple exceptionalities any intimation that they "should" be able to cope because of a higher cognitive ability only serves to enhance vulnerability and negative self - worth.

Recognition of social and emotional needs

The asynchronous profile of the gifted learner with multiple exceptionalities who has significant differences between learning abilities will manifest as learning, social and emotional needs (Berresford, 2010). Even if a child is performing at the age appropriate standard, this may cause the child immense frustration and negative affect if the gift and the

disability cancel each other out, leaving the child performing at an average level on paper. Negative self-concept is higher for gifted learners with multiple exceptionalities than it is for solely gifted students, or students with special needs (Barber & Mueller, 2011).Therefore, Berresford argues that the *need* for support for gifted learners with multiple exceptionalities must be based on affective issues rather than baseline performance.

This understanding of the socio-emotional needs of gifted learners with multiple exceptionalities was only partially supported by IPP team members. A third of respondents thought performing at the norm academically was an indication that the gifted learner with multiple exceptionalities was being well catered for. Further, less than half the IPP teams espoused or enacted an understanding that the social and emotional needs of gifted learners with multiple exceptionalities were an important factor that must be addressed. This is concerning, given the documented vulnerability, low self-concept and chronic underachievement over time of gifted learners with multiple exceptionalities whose socio-emotional needs are not understood. Understanding these affective needs may enable meta-cognitive strategies such as self-advocacy and goal setting to be programmed, to help gifted learners with multiple exceptionalities succeed (Betts & Neihart, 2010). The fact that over half of the IPP teams failed to recognise the social and emotional needs of gifted learners with multiple exceptionalities will act as a barrier to inclusion for these students.

Taking a strengths-based approach

As a specific subset of gifted students, gifted learners with multiple exceptionalities require teaching strategies that take a strengths based approach, focussing on challenge, accommodation and remediation, in that order (Betts& Neihart, 2010; Olenchak & Reis, 2002). By providing a teaching environment that fits the child in terms of their high intellect, social and emotional problems and negative behaviours can be reduced significantly (Neihart et al., 2002; Baum et al., 1996).

Just over a third of respondents in the study either disagreed or did not know that gifted learners need challenge/accommodation/remediation as the basic structure to their curriculum. Whilst some IPP teams gave clear and often moving narratives that indicated their understanding of this strengths based approach, other IPP teams told a story of remediation first, second and third, which understandably had not been successful in ameliorating behavioural problems and reducing anxiety. The absence of parents and the student as part of the IPP team will be discussed later. However, it may be pertinent to

question whether inclusion of the child and whanau within the IPP team would have resulted in greater implementation of a strengths-based approach, given that parent and child viewpoints would be expected to give a more holistic (including strengths) picture.

Therefore, findings suggest that there is a willingness amongst IPP teams to find a place for gifted learners with multiple exceptionalities within inclusive education, and that there is mutual respect and some shared values between IPP team members from both gifted education and special education to cater for the individual needs of the gifted learner with multiple exceptionalities. There was no indication to support Siegle and McCoach's (2005) findings that special education teachers (taken here as SENCO and RTLB) tend to have a negative view of the gifted – if anything, their understanding and knowledge contributed positively to the notion of giftedness within inclusive education. Values were not, however shared comprehensively across and between IPP teams, and concerns were expressed that beliefs don't always translate into practice. Of greatest concern is the limited knowledge and understanding of the unique needs of gifted learners with multiple exceptionalities, in terms of classroom provision, social and emotional needs, variance in required day-to-day support, and evaluation of the support in terms other than academic scores. This means that these students may still be excluded from their own classrooms, despite the positive intentions of support teams.

6.3. Roles and responsibilities

Being competent at your own role and responsibility area, and knowing the roles and responsibilities of other IPP team members is a core competency for interprofessional practice (Suter et al., 2009). Being able to complement one another professionally is critical for child centred educational provision. If team members lack individual expertise, this can limit the work of the whole team (IPEC, 2011). Therefore collaborative practice depends on maintaining and increasing individual expertise and being able to articulate/clarify that unique contribution to oneself and others.

Formal training

Research shows that interprofessional postgraduate education has improved roles and responsibilities within the health sector (Pullon & Fry, 2005). Within education, the Education Review Office recommended that school leaders should "promote specialist

training and development for people specifically responsible for gifted and talented education" (ERO, 2008, p.54). Six years on, the findings of this research show a considerable (some might say alarming) lack of formal training in the area of gifted learners, with or without multiple exceptionalities, within the majority of IPP teams. Different patterns of formal training were evident for those who were from a special education background (SENCO, RTLB) and those who were from a gifted education background (gifted and talented coordinator, teacher for gifted children). Whilst special needs educators had tended to receive formal training in gifted learners and gifted learners with multiple exceptionalities as well as learners with special needs, this trend was not evident in the opposite direction. Gifted and talented coordinators had no formal training in special needs education or in gifted learners with multiple exceptionalities, and some had no formal training in gifted education either. It would appear that the findings support the claim by Riley (2013) that gifted education teachers cannot access inclusive research, policies and practice, and are becoming increasingly isolated. However, the findings do not support Riley's other claim, that special needs educators are unable to access information and knowledge about gifted learners. Gifted education teachers may also be limiting the work of the whole team by lacking individual expertise in their own area of gifted education. Further research as to why gifted education professionals are unwilling or unable to partake in professional development in gifted education may be necessary and timely.

Knowledge

When professionals share their knowledge with the team, all members of the team grow in confidence, expertise and understanding (Dettmer et al., 2009). Perhaps not surprisingly, given the limited formal training (outlined above), the findings of this study show that IPP team members recognised that their own limited knowledge and the lack of knowledge within the IPP team affected the team's ability to meet the needs of gifted learners with multiple exceptionalities. This limited knowledge also impacted on the willingness of team members to take primary responsibility for the gifted learner with multiple exceptionalities. According to Clark (2002), gifted learners with multiple exceptionalities need not only a collaborative team, but also a lead worker who takes on case management in a similar fashion to lead workers in special education. Most teams gave conflicting answers as to who had responsibility, with respondents rarely accepting the responsibility themselves or stating a joint effort, preferring instead to nominate someone else in the team. Only one IPP team out of seven agreed on a shared responsibility. This may indicate a lack of

coordination and teamwork within the IPP team, or it may indicate a lack of a confidence and knowledge to be the specialist key worker or stakeholder for the student. Either way, without clear team roles and responsibilities based on individual expertise, it is easy to see how and why gifted learners with multiple exceptionalities can fall through the gaps, even after identification. There was however, a curiosity and interest displayed by respondents to access more study and information on gifted learners with multiple exceptionalities. Respondents were aware of how their limited expertise may impact upon the outcome for the student, which is surely the first step to improving this core competency.

Definitions

As the TKI gifted and talented website states, there are hundreds of definitions of the term gifted and talented (MoE, 2013). They include a wide range of students with many different abilities and vary school to school and culture to culture. Definitions of gifted learners with multiple exceptionalities within New Zealand have tended to use the terminology "twice exceptional" to refer to students whose high potential or performance is masked or impaired by a disability of some kind (MoE, 2013).

Definitions of gifted learners with multiple exceptionalities from this study were equally wide ranging and varied in accuracy, detail, and reference to social and emotional needs as well as academic needs. Only one team had a mutually agreed definition, meaning that each of the other six teams had members who were working with the same student, yet were unaware that they were working from often completely different definitions. This presents difficulties for an IPP team even before they begin! Developing a shared understanding between team members, starting with working definitions, even on a flexible case by case basis is imperative to a successful process and outcome.

Identification

Gifted learners with multiple exceptionalities can be identified by one of three routes: the 'special needs' route; the 'gifted route'; or the 'average route', where giftedness is masked by difficulty, at least for a time (Brody & Mills 1997). Responses from this research indicate that students were identified either through the gifted route, or through the special needs route, with a "label" of gifted with multiple exceptionalities (or twice exceptional) being confirmed at a later date. There were no students identified who fit the third category – of performing just at average due to the giftedness and the difficulty cancelling each other

out. This finding may suggest further exploration or research be done into identification of those whose giftedness is masked, as these may be the least identified, and therefore most at risk category because neither need receives support (Wormald & Vialle, 2011). A wide range of exceptionalities as well as giftedness was reported, which is encouraging. However further research is necessary to ascertain if any one particular exceptionality is over or under represented in identification patterns for gifted learners with multiple exceptionalities.

Much research attests to the importance of a multidimensional, multi-disciplinary, collaborative-consultative approach to identification (Fetzer, 2000; Landrum, 2001; Nielsen, 2002; Rogers, 2010). IPP teams responded that gifted learners with multiple exceptionalities were recognised "officially" and given the twice exceptional "label" by private educational psychology services, but this was usually after the student had been identified as either gifted or special needs by the parents and school. The educational psychologist used a combination of teacher checklist, assessment battery (usually the Weschler Intelligence Scale for Children – WISC-1V), and parental interviews as advocated by Fetzer. However, whilst their identification methods appear to be multidimensional, they are not multidisciplinary. Educational psychologists were not seen as part of interprofessional practice teams, and typically were not involved post-identification - thus a collaborative approach was not evident.

Baum, Owen and Dixon (1993) state that gifted learners with multiple exceptionalities are usually identified when parents or teachers suspect a problem. Parental involvement in identification is key, as they can provide insight not readily accessible to the teacher (Baum et al., 1993; Rivera, Murdock & Sexton, 1995). It is interesting to note that in all IPP teams initial concern was raised by the parent. This was sometimes in collaboration with an education professional, nevertheless, the parent executed a clear role showing expertise in identification within the IPP team. This raises questions as to the place of the parent/whanau within interprofessional practice teams, specifically whether their non-inclusion in the team (see later section on communication) means we are losing much needed knowledge and expertise. Even the name "interprofessional practice teams" may well exclude parents and whanau from the collaborative group. Further, no IPP team considered the child as part of the IPP team. Excluding the person who may be most knowledgeable about the issue (the student) by their absence from the entire process raises questions about how inclusive a process that gets done "to" the child, rather than "with" the child actually is.

Provision

Ainscow (2005) reminds us that vigilance is needed to scrutinise how deficit-based assumptions influence how we perceive certain groups of students. Research shows that once a student has a special education label, special educators do not look for gifted traits or refer the student to gifted programmes (Bianco, 2005). Similarly, the unique learning profile of a gifted learner with multiple exceptionalities may invite inaccurate teacher perception such that they may be misdiagnosed for a psychosocial disorder (Webb et al., 2005). The narrow identification focus of special needs education and gifted education may well affect the ability to identify and provide for gifted learners with multiple exceptionalities (Bianco & Leech, 2010).

Questionnaire and interview responses indicated a difference between the teaching strategies participants would consider for gifted learners, learners with special needs, and gifted learners with multiple exceptionalities. Specifically, most teaching strategies used for gifted students were also recognised for gifted learners with multiple exceptionalities. However, strategies recommended for special needs students were rarely recommended for gifted learners or gifted learners with multiple exceptionalities, and "gifted strategies" were not seen as portable to other groups of students, such as all students or students with special needs. The concern here is that gifted learners with multiple exceptionalities may not be "identified through provision" as gifted if they have been identified via the special needs route first. The teaching and learning strategies that enable them to show their giftedness are not available, a situation similar to that outlined in Tolan's 1996 essay "Is it a cheetah?". Tolan asks whether the cheetah (a metaphor for the gifted child) is still a cheetah even if it can't run fast because it is fed on dog chow and made to live in a cage with little exercise (metaphors for inappropriate teaching and learning). Rogers (2010) reminds us that all teaching and learning strategies are appropriate for all learner profiles. Whilst it is encouraging that this research shows those who are identified as gifted learners with multiple exceptionalities are offered the same range of teaching strategies as those offered to solely gifted students, it may be impossible for students who present predominantly as special needs learners to show their giftedness within the classroom. This may be one reason why parents raise initial concern (see the above section on identification), and highlights the need to use the expertise of parents throughout the process.

IPP teams showed a positive attitude towards gifted learners with multiple exceptionalities, and felt confidence in identifying the students. However, there was a noted decrease in confidence levels within the IPP team when it came to catering for their needs. It appears therefore that identification is not enough to ensure appropriate provision for gifted learners with multiple exceptionalities.

6.4. Communication

Frequency of meeting all together

IPEC (2011) regard communication as a core aspect of interprofessional practice and team members must work towards a common understanding of the issue by expressing their individual knowledge and opinions to the team clearly, confidently and respectfully. Bennett-Emslie and McIntosh (1995) identified the single most important factor to foster collaborative teamwork is the frequency of team meetings, which enable more dialogue to occur between team members. McCallin (1999) found that poorly established dialogue means that service provision deteriorates, because IPP team members do not iron out their differences enough through discussion to put the client in the centre. The findings from this study show that just over half the IPP teams met regularly for identification and provision of gifted learners with multiple exceptionalities. However, the other IPP teams never met all together (either face to face, or virtually) when working together at any stage of the process, which really begs the most basic definition of "team". Respondents indicated that either it was not necessary to meet as a full team, or that it was not possible to find time (or space) to do so. According to Baggs and Schmitt (1997) this may indicate that teams have not communicated their readiness to work together. This research was not intended to be evaluative, and therefore there was no intention to assess whether increased communication resulted in better outcomes for the student. However, comments shared by IPP team members indicated a more positive, more supportive and less fragmented team identity when communication was regular and all together.

Technologies

There is a need to use time and place saving communication tools and technologies if interprofessional practice is to be effective (IPEC, 2011). Although some IPP team members expressed an interest in using technology to overcome this time issue, no team used Skype or

Google Hangout or other technology to enable meeting all together, and there was a sense of resistance to using these tools due to a perceived inability to build relationships and trust remotely, as compared to face-to-face. Given that IPP teams expressed strong feelings that it was very difficult or almost impossible to be in the same location at the same time, further research must ask questions about the reasons for the indifference of professionals to making use of technologies that would enhance team function through increasing communication frequency.

Literacy

It is important that professionals present information in a way that others (including whanau) can understand. Using subject specific jargon and acronyms can negatively affect communication within an interprofessional practice team that relies on a common shared language to be effective (Docherty & McCallum, 2009). Within this research, findings show that terminology was not used consistently within some IPP teams, especially around the understanding of 'exceptionality'. Twice exceptional was a term rarely used within IPP teams until the 'label' was applied usually after assessment with an educational psychologist. There was concern expressed from some IPP teams that assessment reports from professionals such as psychologists were not easy to understand and decipher, which affected teacher buy-in and willingness to implement strategies. Whilst reports were seen as helpful for identification, limited communication systems (time and location issues) meant that expert advice was not readily available to assist with following report recommendations.

The place of parents/whanau in the interprofessional practice team

Research shows parental involvement in identification of gifted learners with multiple exceptionalities is key, as they can provide insight not readily accessible to the teacher (Baum et al., 1993; Rivera, Murdock & Sexton, 1995). Similarly, when it comes to meeting their needs, it is critical to know the interests and strengths of a particular child (Reis, Burns, & Renzulli, 1992), which is clearly something the parent has in-depth experience of. In this study, even though (as noted above) parents were instrumental in raising initial concern and beginning the identification process, only two IPP teams out of seven considered parents a part of the IPP team, and even then there was uncertainty of their role within the team. This is of concern, given that Biddulph et al., (2003) found that children's achievement is improved

if home-school partnerships are genuinely collaborative and parents and teacher recognise each other's specialist knowledge and understanding. Riley (1999) reminds us that it 'takes two to tango' – it is up to parents and teachers together to support the educational dance of the gifted student. It is interesting that six out of the seven IPP teams studied had gone through an IEP process with parents and whanau, but still did not consider the parent to be part of the IPP team. The conflict between these two findings may be an area for further research into how genuinely collaborative and equal the IEP process is. Relatedly, no students were considered to be part of the IPP team. Although outside the scope of this study, further research would be fruitful in exploring how the students themselves perceive the IEP process in terms of collaboration and self-advocacy.

Communication with the health care sector

Two of the IPP teams within the study were centred around students who needed to access health sector services, such as a psychiatrist or a child paediatrician. Other than to fill out forms, there had been no communication by the health sector with the school (and vice versa), and there was a feeling of concern addressed by IPP team members as to the role of the health sector in supporting the whole child. This may be partly to do with a lack of shared time and space to share informal interactions, to allow team members to identify similarities and differences (McCallin, 2001). It may be also be indicative of difference in values and culture between the physician whose cognitive map requires him/her to adopt a more authoritative individual approach that is focussed on 'cure', as opposed to an education sector that values 'care' (Hall, 2005). Consequently, there was no acknowledgement of the health sector being part of the interprofessional practice team by any of the IPP teams in the research. Team function is also seen to decline when team members have separate lines of management (as identified by West & Poulton, 1997) and so with different management structures, different spaces, different cultures and different values, future research must focus on how IPP teams can work when their members belong to different sectors such as health, education, social work, and corrections.

Finally, IPP teams were asked about their use of policy documents. This study did not aim to find out whether the schools had G&T policies that included information on gifted learners with multiple exceptionalities. Rather, it aimed to find out whether these policies were actually being *used*. The majority of IPP teams did not access any school based documentation on gifted learners with multiple exceptionalities. The most common response

was that team members did not think there were any policies so they didn't seek them out. The only team where every person on the team accessed the policy documents on gifted learners with multiple exceptionalities were the team who had written the policies themselves. This is an interesting finding, given that one would expect the teams with G&T coordinators in them to have the knowledge and remit to write the school policies. An area of necessary further research in New Zealand would be to explore the evidence, quality, availability, ownership, and usage of gifted and talented policies that specifically reference gifted learners with multiple exceptionalities.

6.5. IEPs

As Fetzer (2000) states, Individual Education Plans are one of the best ways to ensure the needs of the gifted learner with multiple exceptionalities are met. This is because IEPs act as a guide to managing the various safeguards that a student needs (Davis & Rimm, 1985). IPP teams within this study agreed that following an IEP process helped to improve outcomes for the student, because it acted as a framework to support regular meetings, offered a coordinated approach, and set targeted objectives and outcomes. Many respondents spoke of the IEP process as a positive 'trigger' to mobilise support and thus advocated for the IEP process to begin as early as possible.

One concern expressed by parents was the lack of information and understanding of their right to call for an IEP. According to the Ministry of Education (2012c), schools and parents decide together whether a student with special educational needs will have an IEP. In this research, parents felt unable to request or initiate discussion about the possibility of an IEP because the information about their rights was not available to them. Further research is necessary to explore this important area of ensuring parental awareness of their educational rights. Data on the use of IEPs for gifted students is also needed to ascertain their use and effectiveness.

6.6. Teamwork

Teamwork is necessary in any setting where professionals have shared goals for the care of patients (IPEC, 2011), or in educational settings, care of students. IPP team members

need to cooperate with one another, coordinate services so there are no duplications or gaps, and collaborate to share problem solving and decision making. Teamwork relies on the three other key competencies of shared values, being clear about roles and responsibilities, and practising effective communication. Teamwork also requires specific training in what McCallin (2001) calls the concept of collectivity, the bigger picture, and citizenship skills. McCallin asserts that few healthcare professionals are taught these teamwork skills and thus they are not part of their professional identity. Hall (2005) asserts that in health, teamwork skills that are taught do not focus on communication across professions and individuals are prepared only to work within their own profession, not individuals from another profession.

Similarly, in this research, not all education professionals had been taught teamwork skills. Special needs educators (SENCO and RTLB) had received training in teamwork skills, and were recognised for using that expertise for the benefit of the team. In contrast, G&T coordinators had not received anywhere near the same level of teamwork training. The Post-Graduate Diploma in Specialist Teaching at Massey University that commenced in 2011 offers seven special endorsements (one of which is gifted and talented), all of which are explicitly taught interprofessional practice teamwork skills such as communication, consultation, and collaboration. This course is compulsory training for RTLB, and whilst findings cannot be generalised, the two IPP teams who had an RTLB as a team member saw them as instrumental in getting the team together, keeping the team together, and outlining systematic processes for the team to follow. As such, RTLB took on a leadership role that supported team collaboration. Evaluation of the relationship between explicit interprofessional practice teamwork education (such as the PGDip in Specialist Teaching) and successful leadership/management of IPP teams to broker positive learning outcomes for students will be a necessary future research aim within NZ education.

Respondents did not appear familiar with the concept of interprofessional practice teams, with just under half the teams expressing the feeling that although they acted as a team, they probably would not have seen themselves as a discrete unit or called themselves a team. A culture of interprofessional practice teams was not yet evident.

6.7. Summary

There is little or no research in New Zealand on how interprofessional practice teams work to meet the needs of gifted learners with multiple exceptionalities. This research highlights a number of findings that are concurrent with the research on interprofessional core competencies:

- Shared values and mutual respect are core components of effective interprofessional practice. These are evident between IPP team members, supporting the place of gifted learners with multiple exceptionalities within inclusive education. However these do not always translate to effective practices, academically, or socio-emotionally.
- Clear roles and responsibilities, including individual expertise are necessary for quality interprofessional practice. Blurred roles and responsibilities may have resulted from a lack of training and limited knowledge across all IPP team members (including G&T coordinators) on how to identify and how to meet the needs of gifted learners with multiple exceptionalities. This may negatively impact the practical implementation of shared values on inclusion.
- Communication is a key component of interprofessional practice. Variation occurred between IPP teams on the frequency of meetings, the inclusion of parents and whanau on the team, the ability to get the team all together using technologies instead of face-to-face, using mutually agreed terminology, and the ability of the IPP team to communicate in a genuinely collaborative and non-hierarchical manner.
- Teamwork skills, roles and processes require training in collaboration, communication and consultation in order for the IPP team to function well. Many respondents have not had teamwork training, especially those not trained in special education. G&T coordinators had far less teamwork training that their special needs counterparts. Those team members that do have specific teamwork training were recognised as critical to the effectiveness of the team process. However, the concept of an interprofessional practice team was not evident across most IPP teams

This research leaves us with many directions for future research. It goes some way to shining a light on how a small number of IPP teams work. Undertaking further research on the effectiveness of IPP teams would seem an essential next step. Once we have some idea on *how* IPP teams work, research can then examine *how well* they work.

CHAPTER 7

CONCLUSION

7.1. Introduction

Transforming the school experience to meet the needs of a diverse population of learners has to be the goal of education in Aotearoa New Zealand if it is to become truly inclusive (UNESCO, 2005). This includes meeting the academic and socio-emotional needs of the gifted learner with multiple exceptionalities. Research from home and overseas indicates that identification and provision of appropriate learning opportunities for this unique group of learners has frequently been compounded by limited understanding, limited knowledge and limited training by teachers. Overseas research on interprofessional practice (IPP) teams has shown their effectiveness in providing multidisciplinary, multidimensional collaborative support for schools to meet the needs of gifted learners with multiple exceptionalities.

The objective of this research was to explore experiences and understandings around how interprofessional practice teams work in New Zealand educational settings, with gifted learners with multiple exceptionalities. Specifically, the research explored how IPP teams conducted their business in terms of the four core competencies of interprofessional practice (shared values, roles and responsibilities, communication, and teamwork), as identified by the Interprofessional Education Collaborative (2011). The results presented in this study are based on case studies of seven interprofessional practice (IPP) teams that had worked with a gifted learner with multiple exceptionalities over the last two years.

7.2. Contribution to research

This study makes an original contribution to New Zealand based research in education. It highlights a number of interesting findings, such as a majority of IPP team members sharing a belief and value system that was positive, equitable and inclusive about gifted learners with multiple exceptionalities. However, in practice, some IPP teams had neither the knowledge or understanding to be able to meet the needs of gifted learners with multiple exceptionalities, either academically or socio-emotionally. Participants considered their limited formal training and limited knowledge about gifted learners with multiple

exceptionalities to have hampered the confidence and work of the whole team. Within IPP teams, communication was seen as important for effective team function, but affected by frequency of meetings, limited coordination, different definitions, limited use of communication technologies and limited use of school policies. There was also confusion regarding the roles of parents and of students within the IPP team. Few members of the team, especially outside of special education specialisms, had received teamwork training. The teams perceived those who had received formal teamwork training to be effective at using these skills for more effective team function.

The findings of this research indicate that within these New Zealand-based case studies, the concept of interprofessional practice teams around gifted learners with multiple exceptionalities is still in its infancy, with limited understanding, training, and education about what this means and what is required. The core competencies of interprofessional practice teams are not yet well enough developed to guarantee effective support for classroom teachers. Individual educators may well make a difference for gifted learners with multiple exceptionalities, but limited systems level function does not ensure consistency of recognition and support of these students.

Within case study methodology it is not possible (and there is no intention) to generalise findings to New Zealand at large. However, commonalities evident through the multiple case study approach give us a snapshot of practices at this time and may be useful when thinking about future research, policies and practice.

7.3. Future recommendations for research, policy, and practice

Recommendations for further research are indicated throughout the Discussion section, as well as below. In terms of practice, this research indicates that limited individual knowledge, as well as limited knowledge about other's roles and responsibilities, is the major barrier to effective interprofessional practice for teams who work with gifted learners with multiple exceptionalities. Therefore, under- and post-graduate interprofessional education is essential to enable all educators to have clear understandings of their own and others expertise. Specifically, as indicated by ERO (2008), those working with gifted and talented learners must be upskilled, and school leadership must make this a priority within their professional development planning. It is also recommended that knowledge and

understanding of gifted learners with multiple exceptionalities be part of pre-service training for teachers, and also feature in RTLB and educational psychologist professional development.

This research provides insights into how the limited role of the parent and student within the IPP team can act as a barrier to effective identification and provision, affecting development of a strength-based approach. In order to ensure inclusion of parents, child and whanau within the interprofessional practice team, one important recommended policy step is to change the name from interprofessional to something reflecting inclusion of all parties. Terminology does matter and in order to reflect the bicultural nature of Aotearoa New Zealand, Interprofessional Practice and Whanau (IPW) teams is suggested to replace IPP teams.

This research provides information on the communication strategies used by IPP teams. Given that published research and participants from this study attest to the importance of frequent, targeted meetings that are genuinely collaborative and involve the whole team, it is recommended that an Individual Education Plan (IEP) process is set in motion, as a matter of course and at the earliest opportunity for gifted learners with multiple exceptionalities. This process should include a key worker/stakeholder who has responsibility to coordinate all services, similar to structures already available to Ongoing Resource Scheme (ORS) funded students. Further research is recommended on the quality and availability of school policy documentation on gifted learners with multiple exceptionalities, and also on the benefits and barriers of using new technologies to enhance communication between the team, specifically in overcoming time and location constraints to be all together.

This study looked at interprofessional team work practices through the lens of gifted learners with multiple exceptionalities, who straddle more than one area of education specialism. Training in collaboration, consultation, communication, team roles and processes *across* disciplines rather than within them would be beneficial to developing effective teams. It is therefore recommended that interprofessional team work becomes an evidence-based competency for all professional appraisal schemes within the education sector.

7.4. Final thoughts.

New ways of thinking are as necessary in education as they are in health – just as no one health professional can meet all of a client's needs, so no one teacher can meet all of the needs of all of their students. This research has shown that interprofessional practice teams may be one way to support the paradigm shift to inclusive education and inclusive practices within schools in Aotearoa New Zealand for gifted learners with multiple exceptionalities.

As McCallin (1999) states, having team members from different disciplines can be problematic, although differences can be overcome when a team adopts a client focussed pluralistic worldview. Teams therefore need to ask the question "what will it take for this child to succeed?" They need to ask this question together, and they also need to answer this question together, as an identified team, inclusive of student and whanau. This will be an iterative process throughout the student's school life, dependent on changing personnel, systems, structures and educational directives.

Continuing development of interprofessional practice core competencies by *all* education professionals would appear vital for genuine inclusion of all diverse school populations, including gifted learners with multiple exceptionalities, within New Zealand schools. What is also critical is further empirical research on what teams do, how they do it, and how much it improves student outcomes. We need evidence of New Zealand based practices showing the processes interprofessional practice teams use, and more importantly, whether their effectiveness improves outcomes for our students.

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APPENDIX A:

ADVERT/INVITATION TO SURVEY PARTICIPANTS

Interprofessional practice teams and gifted children with multiple exceptionalities

Are you part of an interprofessional practice team that works with gifted learners with multiple exceptionalities?

We are looking for interprofessional practice (IPP) teams who would like to take part in this Masters research project. Interprofessional practice teams are defined as **two or more** professionals who work together to identify and provide for gifted learners with multiple exceptionalities. These learners can be defined as: gifted students whose performance is impaired, or high potential is masked, by one or more specific learning disability, physical impairment, disorder, or condition.

Your team might include some (but not all) of the following: gifted and talented (G&T, GATE or GT) coordinator, school counsellor, Special Education Needs Coordinator (SENCO), Educational Psychologist, Resource Teacher of Learning and Behaviour (RTLB), Resource Teacher of Literacy, paediatrician, occupational therapist, physiotherapist, Academic Dean, optometrist, specialist out of school provider, parents or other member, or any other professionals.

The research aims to find out how interprofessional practice teams work together to identify and provide for this unique group of learners. There is no New Zealand based research in this area, so by taking part you will be making a very real and direct contribution to learning in New Zealand. You are therefore warmly and enthusiastically invited to participate in this Masters level research project.

You will find more details about the survey, (including ethical considerations), and subsequent interview by return email, but here are the basics:

- 10-15 minutes of your time filling out a survey, sharing how your Interprofessional practise team works
- For those teams who indicate they are willing, a subsequent phone interview of approximately 30 minutes, either individually, or a group Skype, as per your choice.

Both survey and interview are likely to take place in term 2 and 3 of 2014.

Thanks in advance for your participation. I look forward to hearing from you. **Please pass this email message on to your local and regional networks!**

Ethical Considerations

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

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor John O'Neill, Director, Research Ethics, telephone 06 350 5249, email: humanethics@massey.ac.nz".

Jilly O'Brien, MEdPysch student, Massey University, telephone 0210780620, email obriensnz@gmail.com

Associate Professor Tracy Riley Massey University, telephone 06 350 5799 ext 8625, email T.L.Riley@massey.ac.nz

Lecturer Wendy Holley-Boen, Massey University, telephone +64 9 414 0800 ext 41595, email W.Holley-Boen@massey.ac.nz

APPENDIX B:
INFORMATION SHEET

How do interprofessional practice teams work together to identify and provide for gifted students with multiple exceptionalities?

INFORMATION SHEET

Researcher Introduction
My name is Jilly O'Brien and I am currently undertaking a Masters degree in Educational Psychology at Massey University, which requires a research component or thesis. The purpose of this research is to investigate how interprofessional practice teams work together to identify and provide for gifted learners with multiple exceptionalities.

Project Description and Invitation
This project will be looking at the ways interprofessional practice teams who support gifted learners with multiple exceptionalities use the core competencies of values, responsibilities, knowledge and teamwork to inform their practice. Interprofessional practice teams are defined as **two or more** professionals who work together to identify and provide for gifted learners with multiple exceptionalities. These learners can be defined as gifted students whose performance is impaired, or high potential is masked, by one or more specific learning disability, physical impairment, disorder, or condition. You are warmly invited to participate in this study, which will involve a survey and subsequent focus group interview for those teams who volunteer to be interviewed.

Participant Identification and Recruitment
We are looking for interprofessional practice (IPP) teams who would like to take part in this Masters research project. If you choose to participate, you will be asked to complete a short survey on how your interprofessional practice team supports gifted learners with multiple exceptionalities. Randomly selected teams who volunteer to be interviewed will take part in a 30 minute interview usually by phone. Some interviews may also take place via Skype as a team, if the team requests this. Apart from the time taken to complete the survey and the interview (if you agree to be interviewed), we foresee no discomfort for you. Your participation is voluntary and you may withdraw at any time.

Project Procedures
The procedure will involve 10-15 minutes of your time filling out a survey, sharing how your Interprofessional practice team identifies and provides for gifted learners with multiple exceptionalities. For those teams who indicate they are willing, there will be a subsequent phone interview of approximately 30 minutes, either

individually, or a group Skype, as per your choice. Both survey and interview are likely to take place in terms 2 and 3 of 2014.

Data Management

Recording of interviews will be used so that accurate transcription can be made. You can request a copy of the audio recording, after which it will be destroyed. All data is confidential and educational personnel will not be identified in any part of the research. You can request a summary of the project findings.

Participant's Rights

You are under no obligation to accept this invitation.

- Completion and return of the questionnaire implies consent. You have the right to decline to answer any particular question.

If you decide to participate in the interview, you have the right to:

- decline to answer any particular question;
- withdraw from the study (no later than 1 October 2014);
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded.
- ask for the recorder to be turned off at any time during the interview.

Project Contacts

Researcher: Jilly O'Brien, MEdPysch student, Massey University, telephone 0210780620, email obriensnz@gmail.com

Supervisor: Associate Professor Tracy Riley Massey University, telephone 06 350 5799 ext 8625, email T.L.Riley@massey.ac.nz

Supervisor: Lecturer Wendy Holley-Boen, Massey University, telephone +64 9 414 0800 ext 41595, email W.Holley-Boen@massey.ac.nz

Participants are invited to contact the researcher(s) and/or supervisor(s) if they have any questions about the project.

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research. If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor John O'Neill, Director, Research Ethics, telephone 06 350 5249, email humanethics@massey.ac.nz.

APPENDIX C:
PARTICIPANT INTERVIEW CONSENT

How do Interprofessional Practice teams identify and provide for gifted students with multiple exceptionalities?

PARTICIPANT CONSENT FORM – INTERVIEW

The consent form will be held for a period of five years

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time. I understand that I have the right to withdraw at any time, and can decline to answer any particular question/s

I agree to the interview being sound recorded.
I wish/do not wish to have my recordings returned to me.
I agree to participate in this interview and understand that my name will not be used without my permission

Signature: ..... **Date:** .....

Full Name printed .....

APPENDIX D:
QUESTIONNAIRE

Dear Interprofessional Practice Team member

Purpose of this Research

The purpose of this research is to investigate how Interprofessional Practice teams work together to identify and provide for gifted learners with multiple exceptionalities. There is no NZ based research in this area, so by taking part you will be making a very real and direct contribution to learning in New Zealand

How You Can Assist

You are warmly and enthusiastically invited to participate in an online survey. This should take no longer than 15-20 minutes of your time.

For those teams who indicate they are willing, there will be a subsequent phone interview of approximately 30 minutes, either individually, or a group Skype, as per your choice.

You are under no obligation to accept this invitation. Completion and return of the questionnaire implies consent. You have the right to decline to answer any particular question. All data is confidential and educational personnel will not be identified in any part of the research. You can request a summary of the project findings

Best wishes,
Jilly O'Brien

Researcher: Jilly O'Brien, MEdPysch student, Massey University, telephone 0210780620, email obriensnz@gmail.com

Supervisor: Associate Professor Tracy Riley Massey University, telephone 06 350 5799 ext 8625, email T.L.Riley@massey.ac.nz
Supervisor: Lecturer Wendy Holley-Boen, Massey University, telephone +64 9 414 0800 ext 41595, email W.Holley-Boen@massey.ac.nz

Participants are invited to contact the researcher(s) and/or supervisor(s) if they have any questions about the project. This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor John O'Neill, Director, Research Ethics, telephone 06 350 5249, email humanethics@massey.ac.nz.

Section 1: IPP team information

1. How many people make up your Interprofessional practice team?

- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5 or more

2. What is your specialist position/job title?

3. How many years have you been in this role?

- ◯ 1-2 years
- ◯ 3-5 years
- ◯ 6-10 years
- ◯ Over 10 years

4. Please list your relevant educational qualifications

Section 2: Individual Education Plans (IEPs)

5. Individual education plans:
Have you been involved with an IEP for a gifted learner with multiple exceptionalities over the last 24 months?

- ◯ Yes
- ◯ No

6. How confident would you be with the following actions around an Individual Education Plan (IEP)? Rate from 1 (no confidence) to 5 (very confident)

	1	2	3	4	5	N/A
Participating in an IEP process for a gifted learner with multiple exceptionalities?	◯	◯	◯	◯	◯	◯
Instigating (calling for) an IEP for a gifted learner with multiple exceptionalities?	◯	◯	◯	◯	◯	◯
Running an IEP for a gifted learner with multiple exceptionalities?	◯	◯	◯	◯	◯	◯

Section 3: Roles and Responsibilities

7. You are asked to write a definition of gifted learners with multiple exceptionalities. What would you write?

8. Please state any formal study you have received in:

Gifted education	
Special needs education	
Gifted learners with multiple exceptionalities	

9. Who is on your interprofessional team? Tick all that apply

- ☐ Gifted coordinator
- ☐ Special needs coordinator (SENCO)
- ☐ RTLB
- ☐ Educational Psychologist
- ☐ Dean
- ☐ Guidance Counsellor
- ☐ Class teacher
- ☐ Paediatrician
- ☐ Teacher aide
- ☐ Resource teacher of literacy
- ☐ Speech language therapist
- ☐ Parent

Other (please specify)

10. Rate from 1 to 5 your level of knowledge about about what each member of your IPP does (where 1 is no knowledge and 5 is very knowledgeable). Remember to only tick those in your team and leave the rest blank

	1	2	3	4	5
Gifted coordinator	◯	◯	◯	◯	◯
Special needs coordinator (SENCO)	◯	◯	◯	◯	◯
RTLB	◯	◯	◯	◯	◯
Educational Psychologist	◯	◯	◯	◯	◯
Dean	◯	◯	◯	◯	◯
Guidance Counsellor	◯	◯	◯	◯	◯
Class teacher	◯	◯	◯	◯	◯
Paediatrician	◯	◯	◯	◯	◯
Teacher aide	◯	◯	◯	◯	◯
Resource teacher of literacy	◯	◯	◯	◯	◯
Speech language therapist	◯	◯	◯	◯	◯
Parent	◯	◯	◯	◯	◯
Other	◯	◯	◯	◯	◯

Other (please specify)

11. Who has primary responsibility for gifted learners with multiple exceptionalities in your IPP team?

12. How confident do you feel about the following? Rate from 1 (no confidence) to 5 (very confident) by choosing the response that best describes your feelings

	1	2	3	4	5
Defining gifted learners with multiple exceptionalities	◯	◯	◯	◯	◯
Identifying gifted students	◯	◯	◯	◯	◯
Identifying special needs students	◯	◯	◯	◯	◯
Identifying gifted learners with multiple exceptionalities	◯	◯	◯	◯	◯
Recommending provision for gifted learners with multiple exceptionalities	◯	◯	◯	◯	◯

Identification

13. How have the following three types of learners been identified by your IPP team? Please tick all that apply

	Gifted learners	Learners with special needs	Gifted learners with multiple exceptionalities
Teacher nomination/observation	☐	☐	☐
Parent nomination	☐	☐	☐
Peer nomination	☐	☐	☐
Standardised tests of achievement (PAT, e-asTTle)	☐	☐	☐
Standardised tests of intelligence (e.g. assessment by an Educational Psychologist	☐	☐	☐
Behavioural checklist	☐	☐	☐
Pediatrician/health worker	☐	☐	☐
Rating scales	☐	☐	☐
Self-nomination	☐	☐	☐
Portfolios	☐	☐	☐
Other	☐	☐	☐

Other (please specify)

Provision

14. What teaching strategies would you be most likely to use/recommend to teachers for the three types pf learners listed? Please tick all that apply

	Gifted learners	Learners with special needs	Gifted learners with multiple exceptionalities
Ability grouping	☐	☐	☐
Activities to enhance creativity	☐	☐	☐
Cooperative learning	☐	☐	☐
Curriculum compacting	☐	☐	☐
Drill and practice	☐	☐	☐
Independent study	☐	☐	☐
Higher order thinking activities	☐	☐	☐
Projects	☐	☐	☐
Work book/ textbook activities	☐	☐	☐
Individual instruction	☐	☐	☐
Values education	☐	☐	☐
Interdisciplinary activities	☐	☐	☐
Other	☐	☐	☐

Other (please specify)

Section 4: Values and Ethics

15. Which services or resources should gifted learners with multiple exceptionalities be allowed to access? Tick all that apply

- ☐ ORS funding
- ☐ Teacher aide
- ☐ Competitions
- ☐ One-day-a week programmes
- ☐ Extension programmes
- ☐ Assistive technology grants (e.g. for laptop)
- ☐ Health Schools
- ☐ RTLB
- ☐ Guidance counselling
- ☐ Educational psychology services
- ☐ Gifted withdrawal (pull-out) programmes
- ☐ SPELD - specific learning difficulties not- for- profit organisation
- ☐ Resource Teacher of Literacy (RLit)
- ☐ Early Intervention specialist
- ☐ Blind and Low Vision Network (BLENNZ)
- ☐ Te Kura Correspondence School
- ☐ Enrichment programmes
- ☐ Special Education Grant (flexible school funding)
- ☐ Special assessment Conditions (SACs) for exams
- ☐ Literacy programmes like Reading Recovery

Other (please specify)

16. Read each statement and click the response that best describes your feelings about that statement. Click SA if you strongly agree, A if you agree, D if you disagree, SD if you strongly disagree and DK if you don't know

	SA	A	D	SD	DK
a) Gifted learners with multiple exceptionalities who are performing 'above average' are being well catered for by the school	◯	◯	◯	◯	◯
b) Gifted children need to work with like-minds at least some of the time in school	◯	◯	◯	◯	◯
c) Some underachievers are gifted children	◯	◯	◯	◯	◯
d) Gifted children will reinforce their understanding if they teach other less able students in the class	◯	◯	◯	◯	◯
e) Children who are 'below' on most school measures must have their needs met before support is given to those who are on track or 'above'	◯	◯	◯	◯	◯
f) Only gifted children who perform in an academic area should have gifted provision made available to them	◯	◯	◯	◯	◯
g) Gifted learners with multiple exceptionalities need challenge first, accommodation next, and remediation last	◯	◯	◯	◯	◯
h) It is unfair to give extra support and funding to gifted students when that support could be used for special needs students.	◯	◯	◯	◯	◯
i) Gifted learners who are autonomous self-directed learners, performing well academically, need little support	◯	◯	◯	◯	◯
j) If a gifted student is doing badly, for example in writing, this weakness must be dealt with before the student can access advanced content in other areas	◯	◯	◯	◯	◯

Section 5: Interprofessional communication

17. What terms do you use in your daily practice to describe learners who are exceptional in their learning? Tick all that apply

- ☐ ASD (Autism spectrum disorder)
- ☐ SPD (Sensory processing disorder)
- ☐ ADD (Attention deficit disorder)
- ☐ Gifted +
- ☐ GLD (Gifted with a learning difficulty)
- ☐ SLD (Specific learning difficulty)
- ☐ ADHD (Attention deficit hyperactivity disorder)
- ☐ 2E (Twice exceptional)

Other (please specify)

18. How often did the IPP team meet all together to discuss

	Never	1-2 times	3-5 times	over 5 times
Identification	◯	◯	◯	◯
Provision	◯	◯	◯	◯

19. Which communication methods do you use between the IPP team? Tick all that apply

- ☐ Face to face
- ☐ Group email
- ☐ Letter/paper report
- ☐ Google docs
- ☐ Telephone
- ☐ Skype

Other (please specify)

20. Have you accessed any online community that shares gifted and special needs information together?

◯ Yes ◯ No

21. How did you access any policy documents from the school about gifted learners with multiple exceptionalities?

Section 6: Teams and teamwork

22. Teamwork: Have you undertaken formal training/professional development in

	Yes	No
Collaborative practice	◯	◯
Consultation	◯	◯
Conflict resolution	◯	◯
Group roles	◯	◯
Group processes	◯	◯

Section 7: Enablers and barriers

23. What (if any) systems, methods, competencies enabled your IPP team to work well? Name up to three

24. What (if any) would you say were barriers to effective interprofessional practice? Name up to three

25. Are you, as part of an IPP team, willing to be contacted for some short interviews which look a little deeper into the workings of Interprofessional Practice teams?

- ◯ Yes
- ◯ No

Thank you very much for your time