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**PERSONALISING LEARNING:
EXPLORING THE
PRINCIPLES AND PROCESSES OF THE IEP
FOR YOUNG, GIFTED READERS**

*A thesis submitted in partial fulfillment
of the requirements for the degree*

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by

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Abstract

This small-scale qualitative, action research study sought to establish the efficacy of using the Individualised Education Programme (IEP) as an assistive tool towards the differentiation of reading programmes for young, gifted and talented readers. Despite a growing awareness about the importance of curriculum differentiation for all students, research indicates how little some classroom teachers do to meet the needs of gifted readers. The literature reviewed reveals how the prolonged mismatching of instructional reading programmes to the academic and emotional maturity of the gifted reader may well result in underachievement, and a diminished opportunity to learn how to react to challenge.

In November 2006, the New Zealand Ministry of Education launched its personalising learning initiative, which promotes the active participation of students in their education by creating their own learning pathways. Students are encouraged to articulate their learning needs and preferences, and set goals in collaboration with their parents and family/whanau and teachers. With its underlying principles based on collaboration and communication, together with its seemingly flexible structure, this study utilised the IEP as a personalising learning framework for young gifted and talented readers, and as a differentiation tool for their teachers.

Over a five month period, the researcher worked alongside three Year Two/Three teachers from an urban, decile five primary school as they each identified one gifted reader from their classes, and together with the student and the student's parents, set about planning and implementing an IEP, using strategies and approaches suggested by the literature as the most apposite for gifted readers. Data was gathered through in-class observations, participants' journals, focus group meetings, IEP meetings, and semi-structured interviews.

This study reveals the use of the IEP holds great promise as a differentiation tool towards the personalisation of learning programmes for young, gifted readers. Each student attended his or her own IEP meetings, indicated their learning preferences and

needs, helped to set his or her own learning goals, and assessed their own achievement using the IEP goal indicators. Significantly, for the teachers involved in this project, the IEPs proved not only useful as qualitatively differentiated planning frameworks for the students in the study, but many of the goals and strategies used proved pertinent for all children, in particular, for the 'top' reading groups. In this regard, IEPs proved to be 'work-smarter' tools for the teachers involved, serving as planning blueprints for the most able readers in their classes, thereby creating inclusive rather than exclusive conditions for the gifted readers. Furthermore, the insights gained by the teachers involved into the needs of their gifted readers ultimately challenged their personal teaching philosophies, and resulted in changes to their teaching practices for their gifted students.

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Chapter One

Introduction

As I happily prepared my classroom for another busy school year, I glanced at my Year Two class list. Based on the previous year's final reading results, it appeared all the children would fit neatly into one of the four reading groups I had allocated. Labelling each group's reading box the name of a dog breed, I reasoned the students would enjoy being a *Bulldog* or a *Poodle*, a *Dalmatian* or a *Collie*. Checking the list, one name leapt out which I had not previously noted: Edward. Wasn't he the boy who at six had read the entire *Harry Potter* series? Panic. Where would Edward 'fit' in? He clearly was reading well beyond the Collies. Did this mean I'd have to create yet another reading 'group', just for Edward? And more importantly, what precisely would I 'do' with Edward? As my mind filled with images of poor Edward spending the year in the library corner, silently reading, I begrudgingly, covered another box with coloured paper, and labeled it *Greyhound*.

There is, I believe, nothing special about my experience. Many teachers will have experienced students reading at significantly advanced levels to the majority of their classmates, thereby making 'fitting' these children into appropriate reading groups decidedly awkward. Perhaps even more problematic is attempting to differentiate the classroom reading programme so as to provide meaningful and challenging reading experiences for the able reader while at the same time, endeavouring to meet the requirements of several groups of seemingly more 'needy' children. Not surprisingly then, Cathcart (2005) informs us that reading is the curriculum area we offer the least help in for the gifted child, believing "if an eight-year-old is already reading at a 14-year-old-level, why should we offer extra help?" (p. 107).

Yet my personal teaching philosophy is based very much on the assertion that it is *precisely* my role to 'offer extra help' to all children in an effort to enable students to experience 'meaningful learning'.

Teaching philosophies as research foundations

A teaching philosophy is a set of beliefs and understandings about the nature of teaching, the purpose of education, how children learn and the roles and responsibilities of teachers and students alike. “Theoretically this philosophy guides the actions we take. It can provide a foundation to return to, to reflect upon, and to develop” (Holly, Arhar & Kasten, 2005, p. 82).

Three fundamental beliefs serve as my personal philosophy:

- All children have the right to experience meaningful learning.
- It is my role, as the teacher, to guide and facilitate the learning process towards learner independence.
- I am foremost a learner. The more I continue to learn, the more I question what I do, the more I search for answers.

Although my year with Edward proceeded uneventfully, I was becoming ever more aware of the unique cognitive and affective characteristics of gifted students, and that these students require differentiated learning programmes. Yet I was unaware of exactly *how* to differentiate for the gifted students. Disturbingly, an all too apparent mismatch had occurred between my personal beliefs about teaching and learning, and what was taking place in my classroom. In short, I did not witness the type of ‘meaningful learning’ I desired for the most able readers in the class, and I was becoming increasingly troubled by this disparity.

I decided to return to full time post graduate study, majoring in special education, in an attempt to better understand and cater for the gifted students in my class. During the second year of my study I began to consider the plausibility of implementing a framework which could assist teachers in meeting the needs of young, gifted readers in a number of ways, by:

- Defining and setting goals for the able reader.

- Giving a voice to the able reader about his or her reading needs, interests, experiences, and goals.
- Regularly assessing existing goals, and where appropriate, implementing new ones.
- Creating the opportunity for parents/caregivers to share their expertise regarding their child.
- Supporting the classroom teacher with a specific plan for the gifted reader.
- Enlisting the support of gifted and talented advisors.
- Delegating roles and responsibilities to interested parties.
- Creating a collaborative approach towards meeting the needs of the young, gifted reader.

The development of the research questions

Acutely aware of classroom realities, that is, constraints on teacher time, resources and ‘expertise’ in terms of catering for the gifted reader, I did not wish to instigate a new initiative, but rather work within existing and preferably known frameworks.

I was familiar enough with the principles and process of the Individualised Education Programme to realise that its structure may well provide the framework I was seeking for gifted readers. Having used the IEP on a few occasions (but always for students with specific learning or behaviour difficulties) I began to consider the possibility of implementing IEPs for young, gifted readers within the regular classroom setting.

Simultaneously, I became aware of the Ministry of Education’s (2006) personalising learning initiative by way of their discussion document *Let’s talk about: Personalising learning*. Initially frustrated by yet another construct to come to terms with, a closer examination revealed many similarities between the kind of meaningful and personal learning experiences which the Ministry of Education was advocating, and the principles and process underpinning Individualised Education Programmes. Such principles as affording learners a direct say in mapping their educational pathways by setting their own targets and creating their own learning plans seemed to drive the personalised learning construct and dovetail with the fundamental principles

of the IEP. I began to consider the use of the IEP as a tool towards the personalisation of reading programmes for young, gifted readers.

The research questions

A notable gap exists in the literature documenting instances where IEPs have been used as assistive tools towards programme planning for gifted students. Therefore, this research study sought to answer these questions:

- Is the IEP an effective tool in assisting teachers towards differentiating reading programmes for young, gifted readers?
- If so, what particular features of the IEP prove beneficial in assisting teachers towards differentiation of reading programmes for young, gifted readers?
- How well do the principles and processes associated with the IEP align with the Ministry of Education's (2006) personalising learning initiatives?
- What are the shortcomings in the use of IEPs towards the differentiation of reading programmes for young, gifted readers?

The research approach

Holly, Arhar and Kasten (2005) sum up action research as being conducted by insiders, having an explicit value orientation, being geared toward improvement of the researcher as well as the practice, and as being a form of self-critical inquiry. This definition provided a close match to the nature of my research project. In the first instance, I was a classroom teacher, seeking a practical solution to what I believed was a very significant classroom problem – how to challenge and extend the gifted reader in a meaningful way, while endeavouring to meet the needs of the rest of the class, within the constraints of time, an over-crowded curriculum, and lack of personal 'know how'. I also wanted to 'try' out an idea, using an existing instrument (the IEP) as a goal setting and planning tool for gifted readers, towards the personalisation of their learning. Finally, I sought to collaborate with teachers,

sharing and reflecting on experiences in a self-critical manner, in an effort to improve teaching. Clearly, the action research methodology appeared the most obvious and appropriate choice.

The structure of the thesis

The thesis has been organised into six chapters. Chapter one offers an overview of the project, by outlining what led me to undertake this study, and justifies the action research methodology. Chapter two provides an extensive review of the literature surrounding the five main areas of this project: (1) The gifted and talented - definitions descriptors, theories and characteristics; (2) Differentiation - definitions and examples of what differentiation 'looks like' for the gifted; (3) Personalisation - a comparison of both the English and New Zealand constructs, and the implications for our learners; (4) The Individualised Education Programme - its origins and specifications both in the United States and New Zealand; (5) The gifted and talented reader - descriptions, characteristics and programme planning to meet their needs. Chapter three details the methodology of this project, describing the action research approach and explaining the data collection methods and analysis, as well as a chronology of the project. Chapter four contains both the results and the discussion, organised into a three-phase chronology, whereby each results phase is followed by its corresponding discussion. Finally, chapter five discusses the implications of this research, and offers recommendations for teachers, gifted readers, and further research. The thesis concludes with a brief project summary.

This project is the result of a year of planning, research, field work, data analysis, and finally, the writing of this script. For this first-time action researcher, it has been a year of rapid learning and revelations, but as with all new learning, it has not been without the characteristic challenges and trials. Perhaps most significantly, this project has caused me to examine not only my own professional philosophies and beliefs about gifted and talented students, but the theories and ideas held by both international educational communities and those closer to home. In so doing, it has created the opportunity for me to consider the critical role we play as educators in the lives of our gifted students.

Chapter Two

The Literature Review

Introduction

This chapter examines the literature in five major sections. It begins by offering historical concepts of giftedness and proceeds to explore several contemporary models and theories from both international and New Zealand literature. The characteristics and qualities of gifted children are discussed, including the unique traits of the creatively gifted.

The second section scrutinises the concept of differentiation, by defining the construct in both the general education setting, and specifically, for the gifted and talented learner. Several popular differentiation strategies are outlined, including one of the most widely used, Renzulli's Enrichment Triad Model. Impediments to differentiation practices are summarised, and the all important role of the teacher in the differentiation process is discussed.

Section three examines the recent Ministry of Education's (2006) *personalising learning* construct, by comparing it with the *personalised learning* initiatives of England, and offers some possible implications for New Zealand education in the 21st century.

The fourth section details the origins of the Individualised Education Programme, and compares the United States specifications with the New Zealand approach. This section analyses both the underlying principles and components of the IEP, and explores their use for gifted and talented students. It concludes by suggesting some possible barriers to the successful implementation of IEPs.

The final section profiles the characteristics of the gifted reader, and discusses the significance of differentiated reading programmes as one possible measure in avoiding underachievement. New Zealand's approach to the teaching of reading is

considered alongside that of some overseas countries, and some possible implications for teachers are explored.

Section One

Historical overviews of giftedness and gifted education

Modern day interest in giftedness and gifted education is in fact, nothing new. The identification and education of gifted youth has featured in virtually all societies in recorded history. From ancient Sparta, where giftedness was viewed in terms of outstanding combat, warfare and leadership skills, to Renaissance Europe and the recognition of gifted artists, architects and writers, the gifted have been sought out, recognised and rewarded (Colangelo & Davis, 1997). However, according to Colangelo and Davis, today's strong interest in giftedness can be traced back to a few significant people and one Soviet satellite.

In 1869, Sir Francis Galton, a cousin of Charles Darwin, wrote a book entitled *Hereditary Genius*. This book presented an extensive study of eminent male historical figures, such as Bach and Newton, as well as their male siblings and male offspring (Winner, 1996). Since no quantifiable tools existed which could measure ability, Galton focused on 'reputation' as a gauge (Moltzen, 2004a; Smutny, 2003a). He discovered that 23 percent of the brothers, and 36 percent of the sons of these men had also achieved eminence, rates significantly higher than his estimate of one in 400 of the normal population (Winner, 1996). Galton concluded that heredity determines an individual's intelligence, since distinguished persons seemed to come from distinguished families (Moltzen, 2004a; Smutny, 2003a). For Galton, intelligence was an innate, fixed and constant trait.

At the turn of the century, French psychologist Alfred Binet and colleague Theophile Simon were commissioned by government officials in Paris to devise a test to identify 'dull' students in Parisian schools (Smutny, 2003a). Binet's tests on memory, judgment, reasoning, comprehension and the ability to pay attention tended to concur with the criterion - teachers' judgments of intelligence (Davis & Colangelo,

1997). Binet offered the concept of *mental age*, the idea that children grow in intelligence and that any given child may be measurably ahead or behind the typical intellectual level for his or her actual age (Colangelo & Davis, 1997).

Influenced by the theories of Sir Francis Galton, Stanford psychologist Lewis Terman acquired English translations of Binet's scales, modified the tasks to suit American subjects and in 1916, produced the Stanford-Binet Intelligence Scale (Colangelo & Davis 1997; Smutny, 2003a). His new method of scoring involved calculating the ratio between mental and chronological age and multiplying by 100. The result was the Intelligence Quotient, "a fixed and unitary quantity that, even today, claims to be a scientific measurement of intelligence" (Smutny, 2003a, pp. 6-7).

Terman's interest in human intelligence resulted in another significant contribution to the study of giftedness. In 1921 he began his longitudinal study of 1,528 gifted children (those who scored above IQ 135) with an average age of 11 years (Colangelo & Davis, 1997; Moltzen, 2004a). The lives of these subjects were followed from 1922 through to the early 1990s, and their physical, psychological, social and professional lives have all been investigated (Moltzen, 2004b). Significantly, Terman's study dispelled many popular stereotypes and misconceptions regarding the gifted as weak, sickly or mentally unstable individuals (Smutny, 2003a; Passow, 2004). Yet Terman's study had one major limitation: the vast majority of children came from white middle-class families, with gross underrepresentation of other cultural and socio-economic groups (Colangelo & Davis, 1997). This has subsequently led researchers to consider the effects of this bias on Terman's conclusions about giftedness and intelligence (Smutny, 2003a).

Whereas Terman's work depicted the gifted as physically, psychologically, emotionally and socially superior (Moltzen 2004b), the pioneering contributions of Leta Stetter Hollingworth, who supported gifted education and gifted students in the New York city area from 1916 until her death in 1939, highlighted the significant emotional problems and counselling needs of many gifted students (Colangelo &

Davis, 1997). Hollingworth pointed out that the children who faced the most problems were those with the most extreme gifts (Winner, 1996). Simply put, “the greater the gift, the greater the need for emotional education” (Colangelo & Davis, 1997, p. 6).

Around the time Binet and Simon were developing their intelligence test, British psychologist Charles Spearman declared he had found a way to measure an individual’s core intelligence (Bower, 2003). He developed a mathematical method called factor analysis, noting that individuals scored similarly on many items from a range of mental tests. Scores on these single items yielded a single factor, which Spearman termed the general org factor or ‘g’ (Bower, 2003; Gottfredson, 1998). Although Spearman could not define exactly what g measured or how it worked, he deduced g tapped into mental energy that “sprang from an unknown source. A meager trickle of this intellectual force mires people in retardation, a steady stream of it produces average intelligence, and a gusher promotes genius” (Bower, 2003, p. 92). The g debate continues as one of the most zealous concerning the nature of human intelligence.

The last significant event to pre-date the 1970s renaissance of interest in giftedness and gifted education, was the launching in 1957 of the Soviet satellite Sputnik (Colangelo & Davis, 1997). Suddenly, the United States faced a clear technological defeat, and a panicked recruitment of gifted students began. Identified as gifted, called to rise and inflated with a sense of purpose, academically gifted children were ‘hot housed’ soon after the launch of Sputnik. These children were afforded the best books, the best teachers, and the most up-to-date curricula, and in return, were asked to give their best efforts and to commit completely to their education, as the leaders of tomorrow (Kerr, 1997). The Sputnik scare and subsequent focus on gifted and talented students wore off in about five years (Colangelo & Davis, 1997).

Contemporary notions of giftedness

In the ensuing years since Terman’s identification of gifted children based on their IQ scores, much has been realised concerning the inability of IQ tests to measure other

areas of ability, such as creativity and leadership (Cathcart, 2005). Winner (1996) points out that in the many studies of Terman's high IQ students, none reports an association of IQ with drawing ability, for instance. Indeed, a strong singular gift may go completely undetected if overall IQ scores were the only measure. This realisation has led to the need for a much broader definition of giftedness, one that is commonly termed a "multicategory approach" (McAlpine, 2004, p. 45).

Multicategorical approaches to giftedness and talent

One of the earliest and perhaps best known attempts to create a broader definition of giftedness was the 1972 United States Marland Report to the Congress (Cathcart, 2005; McAlpine, 2004). In this report, gifted and talented children are described as those who "by virtue of outstanding abilities are capable of high performance" (The Marland Report, 1972 cited in McAlpine, 2004, p. 46). Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas:

1. General intellectual aptitude.
2. Specific academic aptitude.
3. Creative and productive thinking.
4. Leadership ability.
5. Visual and performing arts.
6. Psychomotor ability (The Marland Report, 1972, cited in McAlpine, 2004, p. 46).

Although the report did not define giftedness as such, it did draw attention to the notion that children can be gifted in specific areas, as well as 'globally' gifted. Such multifaceted definitions are well received by educationalists who desire a more inclusive and less elitist concept of giftedness (Moltzen, 2005). Thus, the Marland Report appears to have paved the way for a number of implicit theories of giftedness.

The Pentagonal Implicit Theory of Giftedness

Sternberg and Zhang (2004) write that implicit theories are “not public or formal. Rather, they are intellectual constructions that reside in the minds of individuals” (p.14). Such are the theories that are employed in making our everyday judgements of the world, and are not examined until they are questioned.

By contrast, explicit theories are the construction of psychologists or scientists and are based or at least tested (in psychology) on data collected from people performing tests which measure psychological functioning (Sternberg & Zhang, 2004). According to these writers, both kinds of theories are needed, and should be studied collectively, but implicit theories offer insights into peoples’ intuitions, in this instance, regarding what makes an individual gifted.

Developed by Sternberg and Zhang in 1995, the Implicit Theory of Giftedness claims that in order for a person to be judged ‘gifted’ they must meet five criteria:

1. The excellence criterion: the individual is superior in some dimension or set of dimensions relative to peers.
2. The rarity criterion: an individual must possess a high level of an attribute that is rare relative to peers.
3. The productivity criterion: the dimension(s) along which the individual is evaluated as superior must lead to or potentially lead to productivity.
4. The demonstrability criterion: superiority of the individual on the dimension(s) which determine giftedness must be demonstrable through one or more tests that are valid assessments.
5. The value criterion: the person must show superior performance in a dimension that is valued for that person by his or her society. (Sternberg & Zhang, 2004)

It is these five individually necessary and jointly sufficient criteria which are said to identify giftedness.

Renzulli's Three-Ring Concept of Giftedness

Perhaps the most widely known and utilised multicategorical model of giftedness is Renzulli's (1978) Three-Ring Concept of Giftedness (Cathcart, 2005; McAlpine, 2004; Moltzen, 2005b). Renzulli examined a number of studies, including Terman's longitudinal study, and reasoned that those gifted individuals who had been successful in life had possessed high levels of ability, but also displayed high levels of creativity and task commitment (Cathcart, 2005). Renzulli theorised that gifted behaviour consisted of the interaction of these three interlocking clusters of human traits: above average ability (not necessarily high ability), high levels of creativity, and high levels of task commitment. Moltzen (2005) explains that Renzulli's model is favoured by New Zealand educators not only because of its more inclusive nature, but also because of its flexibility to reflect the values of different cultures and communities.

Gardner's Multiple Intelligences Theory (MI)

In his 1993 publication *Frames of Mind*, Howard Gardner details the theory behind multiple intelligences:

In its strong form, multiple intelligence theory posits a small set of human intellectual potentials, perhaps as few as seven in number, of which all individuals are capable by virtue of their membership in the human species. Owing to heredity, early training, or, in all probability, a constant interaction between these factors, some individuals will develop certain intelligences far more than others ... (Gardner, 1993, p. 279)

Since this time, Gardner has added naturalist intelligence and also suggested that existentialist intelligence may possibly be added in the future (Moltzen, 2005).

Gardner's theory has become an increasingly popular model for curriculum delivery. As Tracy Riley (2004) explains, the model is based on the premise that intelligence is a kaleidoscope of abilities: verbal-linguistic, logical-mathematical, visual-spatial, musical-rhythmic, bodily-kinesthetic, interpersonal, intrapersonal and naturalist.

While some individuals may excel in all intelligences, most will exhibit varying strengths and weaknesses. Riley (2004a) suggests that the Multiple Intelligences model holds considerable appeal for our nation's educators precisely because of its multicategorical approach to giftedness, rather than a 'single entity' view, and as such, is inclusive of abilities and qualities valued in Maori culture. The Multiple Intelligences approach focuses largely on choice as determined by students' strengths and interests, thereby allowing students to steer their own learning and assessment. However, Riley cautions it is not a curriculum model per se, as there remains lack of research based evidence as to its appropriateness. Yet for many teachers, Multiple Intelligences remains a useful tool by which to afford learners creativity, freedom and flexibility of choice in their learning experiences, in short, the personalisation of learning.

Gagné's Differentiated Model of Giftedness and Talent (DMGT)

Gagné is one of only a few writers to differentiate between 'giftedness' and 'talent' making a very clear distinction between the two. To Gagné:

Giftedness designates the possession and use of untrained and spontaneously expressed natural abilities (called aptitudes or gifts), in at least one ability domain, to a degree that places an individual at least among the top 10 percent of age-peers.

Talent designates the superior mastery of systematically developed abilities (or skills) and knowledge in at least one field of human activity to a degree that places an individual within at least the top 10 percent of age-peers who are or have been active in that field or fields. (Gagné, 1997, n.p.)

Yet it is the role of the all important 'intrapersonal' catalysts (such as motivation and personality) and 'environmental' catalysts (such as education and people) which facilitate (or hinder) the process of spontaneously expressed ability (gifts) developing into highly skilled talents (Cathcart, 2005; Gagné, 1997).

New Zealand's multicategorical approach to giftedness

Gifted and talented education in New Zealand differs from many other countries in as much as there is no national definition of giftedness and talent, rather each school is required to develop their own school-based definition (Bourne & Sturges, 2006; McDonough & Rutherford, 2004). New Zealand's gifted education policy is based on the belief that gifted learners are found in all classrooms and across all cultures and socio-economic groups. To this end, the policy states: "Schools need to develop multicategorical approaches to giftedness that are flexible enough to include the many characteristics that are typical of gifted and talented learners" (Ministry of Education, 2002, cited in McDonough & Rutherford, 2004). This multicategorical concept comprises a wide array of gifts and talents, including exceptional strengths and abilities in academics, creativity, leadership, physical abilities and visual and performing arts (Bourne & Sturges, 2006).

In 2003 a notice in the *New Zealand Gazette* advised that the National Administration Guideline (NAG) 1 (iii) had been amended with a footnote stating: "including gifted and talented students" (Ministry of Education, n.d., a). This meant that as of Term 1 2005, it had become mandatory for all state and state-integrated schools to demonstrate how they were meeting the needs of their gifted and talented students, just as they had been required to do for students who were not achieving, who were at risk of not achieving, and those students with special needs.

Yet if schools are required to meet the needs of their gifted and talented populations, they need to know, in the first instance, exactly who they are looking for.

Broad-based characteristics of the gifted and talented

Ever broadening definitions of giftedness and talent are accompanied by increasing lists of characteristics (Betts & Neihart, 2004; Cathcart, 2005; Clark, 1983; Ministry of Education, 2000; Moltzen, 2004a, 2005). These lists appear to distend even further, when 'subsets' of the gifted are offered. Characteristics of the profoundly and exceptionally gifted (Moltzen 2004a); the gifted learning disabled (Baum, 1990; Baum & Owen, 2004, cited in Ruban & Reis, 2005; Hill, 2005; Sturges, 2004; Tunmer & Chapman, 2005); the creatively gifted (Csikszentmihalyi, n.d; Fraser,

2004; Ministry of Education, 2000) and the underachieving gifted (Hoover-Schultz, 2005; Moltzen, 2004c; Reis & McCoach, 2000, 2002; Whitmore, 1986, cited in Reis & McCoach, 2000) signify the problematic nature of trying to establish a finite set of behavioural characteristics. This may be due, in no small part, to the socially constructed nature of giftedness (Moltzen, 2004a). As Bevan-Brown (2004) explains, within any particular ethnic grouping, a single, all-inclusive definition of giftedness may not be feasible, when differences in lifestyle, values, beliefs, socio-economic circumstances and tribal affiliations are considered.

Cultural perspectives of special abilities

In her research into special abilities from a Maori perspective, Bevan-Brown (2004) explains that the Maori concept of giftedness is both broad and wide-ranging whereby different abilities and qualities are highly valued. Such qualities and values include service to Maoridom, Maori knowledge, spirituality, ability to communicate and negotiate, musical and artistic ability, leadership, mana, sporting prowess, intelligence, outstanding knowledge and appreciation of nature, and cooking ability. When considered in light of Gardner's Multiple Intelligences model, it is evident the Maori interpretation of giftedness is indeed, multicategorical. Among many intrapersonal and interpersonal qualities, patience, aroha, honesty, integrity, humility and a sense of humour are highly valued. From an educational perspective, it is crucial that how special abilities are defined and developed reflects a range of perspectives within society (Moltzen, 2005).

Would the real gifted and talented students please stand up?

Extensive lists from literature detailing behaviours and personality traits of gifted students are helpful in as much as they highlight the diversity and multiplicity of characteristics within this group. Yet as the Ministry of Education (2000) informs: "Each gifted and talented student is unique, with his or her own set of behaviours and characteristics ... It is ... imperative that schools develop a set of characteristics that reflects their individual definition of, and approach to, giftedness and talent" (p. 25). To this end, the Ministry of Education (2000) advises characteristics of the gifted and talented student be categorised as *learning characteristics*; *creative thinking*

characteristics; motivational characteristics; social leadership characteristics; and self determination characteristics. McAlpine and Reid (1996, cited in Moltzen, 2004a) state that the behaviours listed within each group constitute reliable indicators of exceptional talent. A summary of each of these categories follows:

- *Learning characteristics:* displays logical and analytical thinking; quick to see patterns and relationships; quick to master information; easily grasps underlying principles; jumps stages in learning; can recall a wide range of knowledge.
- *Creative thinking characteristics:* produces original ideas, displays intellectual playfulness, imagination and fantasy, has a keen sense of humour and sees humour in the unusual, generates unusual insights, is not afraid to be different.
- *Motivational characteristics:* strives for high standards of personal achievement, is highly self-motivated, sets personal goals, becomes committed to and absorbed in tasks, tends to be self-critical and evaluative, prefers to work independently.
- *Social leadership characteristics:* takes the initiative in social situations, communicates well with others, persuades group to adopt ideas and methods, is adaptable and flexible in new situations, is willing to take responsibility.
- *Self-determination characteristics:* questions arbitrary decisions, displays a precocious interest in ‘adult’ problems, is easily bored with routine tasks, relates well to older children and adults and often prefers their company, asks searching questions.

Winebrenner (1992) presents an exhaustive list of what she terms *general, creative thinking* and *perfectionism* traits of the gifted. The lists mirror many of the aforementioned characteristics, but with the added recommendation that teachers: “Relax! You don’t have to identify anyone. All you have to do is set up learning

opportunities that gifted students will jump at ... the opportunities allow gifted students to identify themselves” (p. 5). While many gifted students may possess abilities so obviously distinct as to set them apart from their peers, there will be a significant group whose abilities are not so evident (Moltzen, 2004a). Some gifted and talented students present with ambiguous traits, their gifts and talents masked by far less appealing behaviours. The creatively gifted are acknowledged as one such group.

Davis and Rimm (1998, cited in Fraser, 2004, p. 149) list a common set of both positive and negative personality traits in creative people, which Fraser (2004) states can be helpful indicators of a student’s proclivity for creativity. Some of these traits include:

- Creativity consciousness
- Confidence / risk taking
- High energy / adventurousness
- Idealism and reflectiveness
- Need for time alone
- Stubbornness
- Uncooperativeness
- Tendency to question laws, rules, authority
- Sloppiness
- Indifference to conventions and courtesies

Unless teachers have a profound awareness of the characteristics of gifted and talented students, lists can prove crucial towards identification. Yet for those teachers possessing a limited knowledge of gifted and talented students, a simple, straightforward list may arguably prove the most beneficial in understanding their unique qualities.

Perhaps one of the least complicated yet all-encompassing lists of characteristics is that devised by Winner (1996). For Winner (1996) the list of defining traits can be reduced to three atypical characteristics:

- *Precocity*: gifted children begin to master some domain (an organised area of knowledge, such as music or language) at an earlier age than other children. Their progress is more rapid, and learning comes easily to them.
- *An insistence on marching to their own drummer*: gifted children learn not only faster than other children, but in qualitatively different ways. They require minimal adult assistance or scaffolding, and are often self-taught. Gifted children solve problems in novel and creative ways.
- *A rage to master*: gifted children appear intense and obsessive about their area of interest. They possess the ability to focus sharply, experiencing states of 'flow', whereby total engagement in their interest area results in a loss of connectedness with the outside world.

To conclude, although it is not possible to provide a fixed, definitive list of traits of the gifted and talented, it is important to identify some of their unique characteristics. When educators are able to recognise the distinctive qualities of gifted students, given appropriate support and resources, they may be more inclined to implement differentiated programmes; a necessity if these students are to thrive in our schools.

Section Two

Differentiation defined

Differentiation, in its broadest sense, is nothing new. Arguably, the essence of teaching lies in the ability of teachers to plan, present, assess and adapt curriculum based on the individual needs of students. In this respect, differentiation has been occurring for some considerable time. One prolific writer on differentiated

instruction in the mixed ability classroom, Carol Tomlinson (2003a, 2005a), draws this simple analogy; just as parents learn pretty quickly to differentiate their parenting for their children whose physical, emotional, intellectual and social characteristics may vary greatly, effective teachers value the individuals in their class, understanding the need to teach each in accordance with his or her readiness levels, interests, and best modes of learning. Thus, differentiation is a term used by educators to describe teaching and learning experiences tailored to individuals, and each of those individuals has unique strengths, interests and abilities, requiring individualised instruction (Riley, 2000, 2004b). Simply put, differentiation is really just common-sense, responsive teaching.

What does differentiation ‘look like’?

As classrooms, by their very nature, are meeting grounds for diverse learner populations, a ‘one size fits all’ approach can be neither responsive nor productive in meeting the multiplicity of learners’ needs in any given class, school or learning community. Recurrent themes of student centred, qualitatively differentiated instruction rooted in assessment emphasise three vital components, stressing in all classrooms teachers deal with these particular curricular elements: (1) *content*: input, what students learn; (2) *process*: how students go about making sense of ideas and information (3) *product*: output, how students demonstrate what they have learned (Ministry of Education, 2000; Riley, 2000, 2004b; Tomlinson, 2003b, 2005b). In short: “... what a student learns, how he/she learns it, and how the student demonstrates what he/she has learned is a match for that student’s readiness level, interests, and preferred mode of learning” (Tomlinson, 2004, p. 188). In recent years, researchers have added to the content, process and product definition by addressing the teacher’s role, evaluation methods, and the goals of differentiation (Dinnocenti, 1998). Importantly, for the classroom teacher this does not equate to “... doing something different for each of the 30-plus students in a single classroom” (Tomlinson, 2005b, p. 2), rather, it is a dynamic blend of whole class, group and individual instruction, whereby teachers monitor the match between learner and learning, and make adjustments as necessary (Tomlinson, 2005b). Consequently, a teacher of a differentiated, mixed ability classroom will require a repertoire of

instructional and management strategies, such as: curriculum compacting (assessing what a student knows about material prior to teaching and planning for what is not known); (Renzulli, 1999; Reis & Renzulli n.d.), independent projects; interest centres, interest groups and learning centres; tiered assignments; flexible grouping; contracts; varying questions and thinking models (Riely, 2004; Smutny, 2004; Tomlinson, 2003, 2005b; Winebrennar, 1992).

Differentiation for the gifted and talented learner defined

The critical area of differentiation in the field of gifted education appears to have undergone a relatively recent rebirth (Reis, 2004) revealing a plethora of curriculum theory, models, menus and instructional strategies for the gifted and talented learner not dissimilar to those advocated by Tomlinson (2003a, 2003b, 2005b) for all students in the mixed ability classroom. However, gifted and talented children are patently different from other students. Their social, emotional, cultural and physical abilities and qualities vary amongst individuals, yet collectively, gifted children are often 'out of step' with their same age peers, perhaps even in conflict with the 'regular' curriculum and its instructional delivery (Riley, 2004b; Winner, 1996).

To this end, many who advocate on behalf of gifted and talented students maintain it is not realistic to expect the regular classroom teacher to accommodate their needs. Supporters of segregation, such as Smutny (2003b) endorse an *exclusionary* programme for gifted children that is offered as an option beyond what is available in the regular classroom and in which students of similar talent are "grouped together to the exclusion of other students ..." (p. 2).

Difficulties arise, however, when an attempt is made to translate such gifted programmes into the New Zealand context, for *inclusive*, rather than *exclusionary* practices beat strong at the heart of New Zealand's educational principles and egalitarian beliefs (Ministry of Education, n.d., b; Mitchell, 1999). Perhaps unique to New Zealand, is the belief that the inclusive classroom is the first place to provide for differentiated learning experiences for gifted and talented learners (Bourne & Sturgess, 2006). Riley, Bevan-Brown, Bicknell, Carroll-Lind & Kearney (2004) state

that 82 percent of New Zealand schools provide for their gifted students in the regular classroom. One reason for this inclusive teaching may well be that our national curriculum is neither prescriptive nor age/year dependent, but allows teachers the flexibility to differentiate programmes of learning to meet individual needs (Ministry of Education, 1993). Certainly, the regular classroom context is seen as effective for catering for the gifted, since this is where most gifted students, whether identified or not, spend the majority of their time at school. Consequently, the prime responsibility for educating gifted and talented students and of providing differentiated learning opportunities rests with the regular classroom teacher (Bourne & Sturgess, 2006).

Of itself, the fact that the regular classroom is where most gifted students tend to spend the majority of their time, although logical, does not constitute a primary reason to support inclusive programming options (Moltzen, 2006). However, it is the inclusive classroom environment, especially at primary level, which, according to Moltzen (2006) “can better accommodate the jagged profile of abilities that is characteristic of most gifted and talented students ...” (p. 45).

One clear advantage of the inclusive classroom over other approaches is that teachers do not have to make definitive decisions about who is and who is not gifted and talented, for there is “always a danger that when some students are identified as ‘the’ gifted and talented group, that the remainder are never considered as potentially gifted” (Moltzen, 2006, p. 45). In the words of one astute 10 year old student from the U.S.A:

I think being gifted must mean being especially good in the arts as well as in the academic field. Some kids think that it just means being in an academically talented program, but a girl in my class with an IQ of 128 who is very good in art is automatically ‘not gifted’ because you need an IQ of 130 to be in our gifted program. That’s dumb. (Delise, 1987, p.1)

What does differentiation for the gifted and talented ‘look like’?

According to Winebrenner (n.d.), differentiation for the gifted and talented is “giving kids stuff their age peers can’t handle and wouldn’t want to” (cited in Schmidt, 2006, n.p.). Riley (2000) concurs, adding that recognising individual strengths, abilities, qualities and interests in gifted and talented students necessitates acknowledgment of the uniqueness of each individual: “Our goal in individualisation should be to seek and obtain a better fit or different style, size, design. The buzzword for this tailoring of the curriculum is differentiation (n.p.)”.

Dinnocenti (1998) offers this cautionary word regarding the term differentiation, stating educational terms often become buzzwords communicated through various media and professional conversations: “...within these dialogues, misconception replaces the intended meaning that results in confusion or lack of implementation for necessary strategies that benefit high ability students” (n.p.). Dinnocenti (1998) stresses differentiation must be accurately defined and described so that pedagogical strategies and classroom environments are appropriate for gifted and talented students.

Appropriate, according to Moltzen, (2005a, 2006) is the offering of programmes that are both *qualitatively* and *quantitatively* different which determine true differentiation for gifted learners. Both accelerated and enriched content are essential in providing for students with special abilities, and both can be offered within the regular classroom. Here, qualitative differentiation refers to enrichment and quantitative differentiation to acceleration (Moltzen, 2006). Townsend (2004) explains: “... acceleration occurs when children are exposed to new content at an earlier age than other children or when they cover the same content in less time” (p. 290) and, “... enrichment occurs whenever children are engaged in additional activities or more demanding activities than their classmates” (p. 291). In practice, there appears to be a reluctance to expose students to content in advance of what is perceived as relevant for the student’s class level, resulting in an overemphasis on depth and breadth (Moltzen, 2006). Perhaps a simple yardstick by which teachers can measure the appropriateness of the learning opportunity is called for.

Passow's (1982, cited in Gross, n.d.) guidelines for the development of curricula for the gifted retain their usefulness more than 20 years on. With respect to the principles of curriculum differentiation in determining whether a particular learning opportunity is appropriate for gifted and talented students, or whether it is equally appropriate for all students, the following three questions should be asked:

1. *Would* all children want to be involved in such learning experiences?
2. *Could* all children participate in such learning experiences?
3. *Should* all children be expected to succeed in such learning experiences?

If the answer to any of these questions is *yes*, then the curriculum that has been planned for the gifted students is, in fact, not appropriate, and unlikely to offer sufficient challenge.

Similarly, Renzulli (2004) has designed the Qualitative Differential Education for Gifted (Q-DEG) Quiz, an 'acid test' for qualitative differences in learning that can be raised in connection with any particular piece of work a student does in a special programme. The 'yes' 'no' answers represent the characteristics of a qualitatively different learning experience:

1. Did every student do it?
2. Should every student do it?
3. Would every student want to do it?
4. Could every student do it?
5. Did the student do it willingly and with zest?
6. Did the student use appropriate resources and methodology?
7. Was the work directed toward having an impact upon an audience? (p. 62)

Clearly, qualitative differentiation is much more than merely altering general teaching methods. It is much more than offering wider choices or providing more knowledge and 'more of the same' content based programmes. Qualitative differentiation requires a philosophical shift by educators to accept that the gifted and talented

students are, in fact, different, and as such, will require differentiation of teaching and learning.

The differentiation menu: What's on offer?

The veritable smorgasbord of definitions, theories, models, strategies and programmes offered to teachers for gifted and talented students may well be described as overwhelming, to say the least. Certainly, the New Zealand Ministry of Education (2000) cites no less than nine different curriculum models in its handbook on gifted and talented education. Yet amongst the literature, certain approaches appear consistently as the most appropriate for the gifted and talented learner: modification of curriculum content, process and product; Renzulli's Enrichment Triad Model; de Bono's Thinking Hats; and Bloom's Taxonomy.

The aforementioned content, process, product elements, for the gifted and talented learner appears as:

- Content: abstract, complex, varied, organised around people, study of gifted people, study of methods of inquiry.
- Process: discovery, open-endedness, metacognition, higher level thinking processes, choice, group interaction, pacing and variety.
- Product: results of a real product, variety, self-selected, addressed to a real audience, appropriately evaluated, and represents transformation of knowledge via originality. (Maker and Nielson, 1995, cited in Ministry of Education, 2000, p. 37)

Joseph Renzulli's Enrichment Triad Model (1977, cited in Renzulli, 1999), is perhaps the best known and most widely used model in gifted education (Ministry of Education, 2000; Riley, 2004b). Developed with the intention of encouraging creativity production in students, the model suggests three types of enrichment, each being interrelated, as opposed to sequential.

Type I, or general exploratory enrichment activities expose students to a wide range of experiences in order to introduce a topic, moving students beyond the regular curriculum to potentially exciting interest areas. Such experiences could be introduced through field trips, guest speakers, the media, and printed material.

Type II enrichment is designed to give students the necessary skills to undertake investigations by developing a range of thinking processes, including creative-thinking, problem-solving, critical-thinking, decision-making and affective processes. Research skills, communications skills and ‘how to’ skills are developed. Type I and II activities are offered to all students.

Type III enrichment activities, however, are more suited to gifted and talented students. Students investigate real problems, either as individuals or in small groups, and become producers of knowledge, rather than consumers, formulating problems, designing research, and producing a product (Ministry of Education, 2000). One example of non-sequential interaction of activity types in the Enrichment Triad is offered by the Ministry of Education (2000, p. 50):

Imagine a classroom of students listening to a storyteller (Type I). During the storytelling, a group of students shows obvious enthusiasm and interest and so spends an additional hour learning story telling techniques (Type II). Consequently, one student decides she’d like to create her own story to share at the city’s storytelling festival (Type III). In writing the story, she discovers she needs more information about her chosen topic (Type I), and then considers the design of a costume type (Type II).

A major criticism of the model is that it may be seen to serve as ‘enrichment only’ nevertheless the model’s flexibility and practicality appeals to both teachers and students alike (Riley, 2004b).

One of the earliest and indeed, most popular thinking models has been de Bono’s Thinking Hats. The hats represent six modes of thinking, each hat being a direction

to think. Students supposedly, recognise that different learning situations require different thinking. The six types of ‘hat’ thinking are described as:

White hat thinking: Focuses on the information available and needed.

Black hat thinking: Examines the difficulties and problems associated with a topic.

Yellow hat thinking: Focuses on benefits and values.

Red hat thinking: Looks at a topic from the point of view of emotions, feelings and hunches.

Green hat thinking: Requires imaginative, creative and lateral thinking about a topic.

Blue hat thinking: Focuses on reflection, metacognition (thinking about the thinking that is required), and the need to manage the thinking process. (Six Thinking Hats, 2005, para 3)

Interestingly, Crebbin (2004) states that even when students are very familiar with the language and process, it is rare to find them voluntarily applying these thinking techniques without teacher instruction. She maintains the same applies for another popular model, Bloom’s Taxonomy.

As early as the 1950s educators expressed concern over the superficial ways in which school content was being learned. A committee under the leadership of Benjamin Bloom was formed, and the creation of Blooms *Taxonomy of Cognitive Objectives* (1956) resulted. Bloom’s Taxonomy (1956) distinguished between six qualitatively different ways of thinking, and categorised learning as occurring at six levels of increasing complexity: knowledge; comprehension; application; analysis; synthesis; and evaluation. The later three ‘higher’ levels are now known as ‘higher order thinking’ or HOT. HOT learning is frequently used as a tool for devising questions or tasks whereby students engage at different cognitive levels. Revised by Anderson in 1999 to reflect contemporary approaches to the fields of cognitive psychology, the taxonomy now comprises: remembering; understanding; applying; analysing; evaluating and creating. However, Crebbin (2004) cautions that Bloom’s taxonomy addresses only a cognitive approach to learning, negating other domains such as

physical and emotional learning, thereby reinforcing the notion that cognitive ways of knowing are the most valued and appropriate in schooling. Nevertheless, the taxonomy remains popular with teachers as a useful framework for differentiating the curriculum. Teachers can use the six levels of the taxonomy to plan alternative questions and design activities based on students' interests, abilities and needs. It can be applied at any age level, across all disciplines and in all classrooms (Riley, 2004b).

Impediments to differentiating for gifted and talented learners

VanTassel-Baska and Stambaugh (2005) write “there are very real reasons that there are limited successes in getting classroom teachers to differentiate for this population” (p. 212). Yet, without addressing these reasons, many students who score highly on standardised tests “regress toward normal levels of achievement” (p. 212). Amongst the many barriers, such as lack of sufficient subject matter on behalf of educators, limited classroom management skills, lack of planning time, and inability to appropriately modify the curriculum, VanTassel-Baska and Stambaugh (2005) identifies two specific attitudes and beliefs about learning that educators must embrace if they are to successfully differentiate for gifted learners. First is the belief that students learn at different rates, possess different abilities and interests and acquire knowledge through different pathways. Second is the belief that the teacher is not the keeper and dispenser of all knowledge, and that students can acquire knowledge through many avenues. Thus, although many ‘outside’ influences are deemed significant in the differentiation process, (such as adequate planning time) unmistakably, teacher attitudes and beliefs play the all important role in determining successfully differentiated learning programmes.

The differentiation staple: The teacher

It could be argued that underpinning all programmes, all methods and all learning experiences for the gifted and talented student is the classroom teacher who invariably determines the success (or otherwise) of differentiation. It is the teacher, according to Tomlinson (1995), who begins with a ‘paradigm shift’ from teacher to facilitator, coach and mentor. This requires a change in teachers’ mindsets from being dispenser of knowledge to learning facilitator (Riley, 2000) and necessitates

five essential skills on the part of the teacher: the ability to assess student readiness; the ability to figure out student learning needs and preferences; the ability to create a variety of ways for students to gather information and ideas; the ability to develop varied means for student exploration and ownership of ideas; and the ability to present an array of avenues for students to express their understandings (Tomlinson, 1995). In short, the teacher scaffolds the learning of the student by providing structured support to enable the learners to construct knowledge for themselves (Campbell, Robinson, Neelands, Hewston & Mazzoli, 2007).

Implicit in such constructivist learning theory is the development of a child's increasing sense of self-efficacy, a sense that the child plays a critical role in shaping his or her own fate: "Many of the gifted believe the highest level of learning is self-developed, with the support, trust, respect and facilitation of educators, parents, and mentors" (Betts, 2004, p. 190). A child of any age is stronger when he or she can say: "This is something important to me. This is something I'd like to try. This is a way things could be better for me" (Tomlinson, 2004, p. 188). To this end, Tomlinson (2004) believes a classroom is a microcosm for the world, a community of individuals in which the good of the individual and the good of all continually seek a balance:

Thus, differentiation is neither a thing the teacher does, nor a way the child functions. It is a learned way of thinking about 'being' that honours and contributes to the uniqueness and possibilities of each person in the group, as it honours and contributes to the success of the whole (p.189).

The 'new look' differentiation

When Tomlinson's (2004) definition, with its strong emphasis on synergy is considered in light of the following, it becomes obvious that the term 'differentiation' has somewhat transformed. According to Campbell et al. (2007), the 'new look' differentiation is now *personalisation*:

... personalisation is a collective activity, not an individualised one, but the collective frame leads to the individual developing her/his learning ... It is also collective in another sense; the values and attitudes that teachers and students bring to learning is derived from, and embedded in, a collective organisational ethos. (p.17)

Such a definition resonates clearly with Tomlinson's (2004) principles of differentiation, maintaining the richest and most responsive classrooms are those where responsibility for developing both the individual and the group is collective. Seemingly, just as the educational discourse of the 1990s established 'differentiation' as a seminal term, personalising learning is fast becoming the new 'pedagogical speak'.

Section Three

Personalisation scrutinised: The English origins

Personalisation is an idea originating through the planning and delivery of public sector services in England. Charles Leadbeater introduced the concept via the Demos think tank and the publication of his paper *Personalisation Through Participation* (2004a). Leadbeater (2004a) defines his conception as the connection between the individual and the collective by "allowing users a more direct, informed and creative say in rewriting the script by which the service they use is designed, planned, delivered and evaluated" (p. 59). To this end, he argues the need for 'deep' rather than shallow personalisation, putting citizens at the heart of public services and enabling them to have a say in the design and improvement of the organisations that serve them. Therefore, personalisation should operate at five increasingly deeply structured levels by:

- Providing more customer friendly services.
- Giving people more say in navigating their way through services.
- Giving users more say over how money is spent.
- Users becoming co-designers and co-producers of services.

- Self-organisation by individuals working with the support of advisory systems provided by professionals. (Campbell et al., 2007, p. 1)

With direct reference to education, Leadbeater (2004b) contends many of the ‘scripts’ have not changed for decades, and indeed, are written largely by professionals, producers and regulators, not by users: “The users are expected to fit into the roles given to them by the script handed down from on high” (p. 7). Hence, Leadbeater’s clarion call is for the rewriting of the education script to become far more user responsive. The key premise is that learners should be continually engaged in setting their own targets, devising their own learning plans and goals, and being able to choose from a range of different ways to learn. It is, in fact, this continual, self-critical assessment of one’s own talents, performance, learning strategies and goals which drive personalised learning (Leadbeater, 2004b).

This is not say, however, that personalised learning is individualised learning, for Leadbeater (2005) highlights that learning stems from creative social interaction. Indeed, with such an emphasis on autonomy, or learners ‘owning’ their learning, it may be tempting to think of personalisation as individualisation, but this is not the case: “The teacher, the student group and the individual student produce together the meanings and understandings that the individual achieves ... it is social, not individualised, practice” (Campbell, et al. 2007, p. 17). The components of personalised learning, as set out by the Department for Education and Skills (DfES) , draw on the work of constructivist and social constructivist research, which pay consideration to the processes of learning, including social interaction, as the learner makes sense of his or her experiences by linking them with past experiences and moving forward to further learning (National College for School Leadership, 2005).

Personalised Learning: What does it ‘look’ like?

In their booklet entitled *A national conversation about personalised learning* (2004) the DfES identify the five key components of personalised learning as: assessment for learning; effective teaching and learning strategies; curriculum entitlement and choice; school organisation; and strong partnerships beyond school. These

components are intended as a framework for implementation, a “set of tools for schools and teachers to employ contextually so as to respond to the challenges they face” (DfES, 2004, p. 14). Whilst some of the guiding principles will be self evident to many educators, such as assessment for learning, which advocates clear feedback for and from pupils so that there is an obvious link between student learning and lesson planning, others are far more obscure in both definition and intent. The school organisation component is merely stated as thinking “creatively about school organisation, so as to best support high quality teaching and learning and to ensure that pupil performance and welfare are mutually supportive” (DfES, 2004, p. 12). However, the purpose of this booklet is not to offer a ‘how to’ guide, but share best practice already found in schools and local communities, and to invite participation in a ‘conversation’ by sharing ideas and opinions. Subsequent publications construct a more comprehensive (if not, at times, conflicting) picture of what personalised learning in action looks like.

Personalised Learning: Recent definitions and descriptors

Gilbert (2006) describes personalised learning as simply “focusing in a more structured way on each child’s learning in order to enhance progress, achievement and participation” (p.3). However, she adds, there is nothing ‘simple’ about rectifying the persistent achievement gaps of the most disadvantaged pupils, stating the factors that contribute to them are complex and inter-related, including individual attitudes, beliefs and expectations of pupils, parents and teachers, linked closely to deep-seated social challenges, such as urban regeneration, economic development and migration.

Leadbeater (2005) paints a far more idyllic canvas, inviting us to imagine personalised learning schools void of timetable restrictions, amassed with personal tutors and teaching assistants who regularly liaise with parents. In such schools, teachers are free to design learning programmes while their technicians prepare materials and develop lessons for the school’s intranet. Teachers often spend part of their week teaching in other schools, for learning and teaching are shared endeavours across communities, and local counterparts work intensively with schools to share

resources and specialist knowledge. Children are engaged in their learning by participating in programme design, assessment, and goal setting, utilising different technologies to present work, following lesson plans on wireless laptops and often tutoring or being tutored by peers and older children. Fantasy? Not according to Leadbeater (2005) who proclaims these images to be drawn from several schools in England; primary, special, middle and secondary, which are at the forefront of developing personalised learning.

The 2006 publication of *Effective provision of gifted and talented children in primary education* (DfES) details precisely what each of the five key concepts of personalised learning (now re-named National Quality Standards) entails for gifted and talented students. The ‘how to’ detail lacking in earlier publications is now abundantly evident, and examples of best practice are supplied via readily accessible grids.

Yet despite these recent descriptors, Stewart and Milne (2007) write of one primary school with 70 percent Asian Muslim pupils who said it had personalised the school environment by putting up bilingual signs, and another that described personalising learning as ‘a way of thinking.’ Nearly four years after ministers adopted it as one of their major education policies, schools still do not know what personalised learning actually means (Stewart & Milne, 2007).

Personalising Learning: The New Zealand way

The Minister of Education launched his *personalising learning* initiative in November, 2006 via a publication entitled *Let’s talk about: Personalising learning* (Ministry of Education, 2006). The booklet shares Steve Maharey’s goal to develop a clear statement about 21st century education in New Zealand: “One that reflects a common understanding of what we want to achieve and the approach to learning that will ensure we get there” (Ministry of Education, 2006, n.p.). Like its British counterpart, the booklet is a ‘conversation’ document designed to introduce the concept and practice of personalising learning and to illicit responses from stake holders. As such, it is void of ‘how to’ suggestions, but does contain examples of personalising learning in action referring specifically to initiatives such as the

Literacy and Numeracy Professional Development projects; asTTle (assessment tools for teaching and learning); the Assess to Learn project; the Team-Up project; and the First-time Principals Programme. The booklet outlines the components of personalising learning, which, apart from one addition, bears a striking resemblance to Leadbeater's (2004) document. The components are identified as: effective teaching; assessment for learning; curriculum; strong and engaged communities; professional leadership; and a highly supportive system, but offer only generic, rather tentative definitions as to how these concepts will apply to personalising learning. Interestingly, apart from one non-specific reference to 'overseas' research, the booklet neglects to mention the English personalised learning construct, its origins, implications and ramifications on the English education system. It is, in short, an introduction to a 'borrowed' concept.

In subsequent addresses, Maharey (2007a; 2007b) elaborates on personalising learning, the New Zealand way. According to Maharey (2007a) New Zealand, as with most nations, is fast transforming into a knowledge society, where the role of knowledge is central. He defines a knowledge society as one where learners need to gain the skills for life-long learning: problem solving, self-motivation, working with others, creativity and innovation, adding that it takes a re-think about knowledge and the role that education plays in learning knowledge to prepare our students for the coming challenges (Maharey, 2007b). Placing a great 'synergetic' emphasis on personalising learning, Maharey (2007a) stresses it is not individualised learning: "It is about enabling teachers and students to learn in meaningful ways, in meaningful chunks, in different student groupings and in safe positive environments where people can take risks and learn from them" (n.p.). Perhaps worthy of consideration, is the possibility that re-naming personalising learning to *inter-personalising learning* would be most appropriate.

In sum, given the paucity of New Zealand publications to date, the relative 'newness' of this initiative in New Zealand, and in light of the fact that it was spawned from the English concept, we can assume with relative safety, that the same recurrent themes of the English construct will apply in New Zealand, and are summarised as follows:

1. Learning should be a deeply personal experience - differentiated provision for differentiated need.
2. Learning is self managing - it occurs through interaction whereby the learner discovers for themselves, reflects on what they learned and how, and sets new goals.
3. Learning stems from creative and social interaction. Personalising learning does not mean individualised learning (although for some people, some of the time, personalised learning could be learning on their own). (Leadbeater, 2005)

To conclude, the personalisation of learning holds great potential in affording students a direct say in mapping their educational pathways. All learners, when continuously engaged in setting their own targets and creating their own learning plans can drive the personalised learning construct. For such an occurrence to eventuate, a framework structured within a highly supportive system, is a necessity. Arguably, one such framework, and one such support system exists by way of the Individualised Education Programme (IEP).

Section Four

What is an Individualised Education Programme?

The origins

The origins of the Individualised Education Programme (alternatively known as the Individualised Education Plan, commonly abbreviated to IEP) can be traced back to United States Congress legislation Public Law 94-142 (Education of All Handicapped Children Act). Congress passed this law in 1975 in an effort to provide support for states and localities in protecting the rights and meeting the individual needs of infants, toddlers, children, and youth with disabilities and their families (US Department of Education, 2000). The keystone of Public Law 94-142 (renamed the Individuals with Disabilities Education Act (IDEA) in 1997) is a guaranteed free, appropriate public education (FAPE) for every child with a disability in every state

and locality across the United States (US Department of Education, 2000). Although each state is responsible for developing eligibility criteria consistent with law, the IDEA is based on five basic principles, as outlined by the Texas Education Agency:

- The right to free and appropriate public education (FAPE). This principle ensures that all children with disabilities are entitled to an educational experience that mirrors that of children without disabilities.
- Appropriate assessment. IDEA calls for assessment from a multidisciplinary group and the employment of a variety of assessment instruments or techniques. Valid and reliable tests, including informal assessment such as student, teacher, and parent interviews and checklists, are essential for FAPE to be delivered.
- The right to an Individualised Education Programme. An IEP is a document that is developed by a team that establishes educational practices based on meaningful assessment. It determines how the student will participate in the regular education environment and the related services and/or accommodations that a student might benefit from (assistive technology, extended time with assignments, etc.). It also states how the student will participate in state-wide assessments.
- The right to be educated in the Least Restrictive Environment (LRE). This principle states that a student with disabilities shall be educated with students without disabilities to the maximum extent possible.
- The right to procedural due process. Due process means that parents and students, as well as school personnel, are informed about every aspect of the student's educational experience. (Texas Education Agency, n.d., n.p.)

In the United States, the IEP is a basic tenet of the IDEA and a binding and legal requirement (Gartin & Murdick, 2005). Once a child with disabilities qualifies for

special education services, he/she receives educational services based upon requirements documented within the Individualised Education Plan (Lee-Tarver, 2006). Since specific amendments to the IDEA 1997, the IEP has increasingly become the responsibility of general educators (Kamens, 2004; Lytle & Bordin, 2001; Menlove, Hudson, & Suter, 2001).

United States specifications

According to the Public Law 94-142 (1975, n.p.) the term Individualised Education Programme refers to a written statement, prepared during a consultative meeting between parents, teachers, the child (where appropriate) and special education authorities. In order for it to be deemed appropriate in accordance with legislation, some specific components must be included in the IEP. The IEP must detail: the present levels of educational performance of the child; a statement of annual goals, including short-term instructional objectives; specific educational services to be provided to the child, and the extent to which the child will be able to participate in regular educational programs; the projected date for initiation and anticipated duration of services; appropriate objective criteria and evaluation procedures and schedules for determining, on at least an annual basis, whether instructional objectives are being met (5& Murdick, 2004; Lee-Tarver, 2006; Public Law 94-142, 1975, n.p; Whitmore, 1985).

Kaye and Aserlind (1979, cited in Lee-Tarver, 2006), describe the IEP as both product and process. As a product, the IEP “serves as a roadmap for teachers and parents to ascertain improvements in the child’s functioning within academic, social, and/or adaptive domains” (p. 263). As a process, the IEP is:

... collaboration between teachers, administrators, parents and when appropriate, the child, in determining goals and objectives. It reflects the dynamic process involved in developing, reviewing and revisiting the educational program in order to best serve the child with disabilities. (p. 263)

Lee-Tarver (2006) suggests the IEP plays a more crucial role than ever before in providing for children with disabilities and their families. Since the most recent reauthorisation of the IDEA in 2004, legislation has established performance goals and indicators for students with disabilities, which are more strongly aligned with goals for students without disabilities (Lee-Tarver, 2006). Accordingly, inclusion in the regular classroom setting has become the focus of the IEP process. The IEP of a child with disabilities is no longer the sole responsibility of special education personnel; general educators are increasingly aware of their roles, as schools are being held accountable for the failure to provide a free and appropriate education. By law, a school must test a child for special education within 30 days of a parent's request. If the child qualifies, an IEP must be drawn up. "If parents and the school cannot agree on whether the pupil qualifies, what services the child needs, or whether the school is fulfilling the IEP, the parents can sue the school. And they do" (The Economist, 2002, n.p.).

The New Zealand perspectives

In New Zealand, the term IEP is widely used and appears to encompass multiple definitions which frequently create confusion (Ministry of Education, 1999). It can represent:

- The complete cycle of assessment, planning, provision and evaluation.
- The meeting at which the individual needs of a student are discussed.
- A plan for an individual student.
- A documented programme for an individual student (p. 2).

For the most part, IEPs are used for students with special education needs, such as a disability, learning difficulty or behaviour difficulty. These students may require extra assistance or adaptation of their learning environment, or specialised equipment or materials to support their regular educational settings (Ministry of Education, 1999). Most commonly, the IEP is viewed largely as an assistive tool in the design and implementation of the most appropriate learning programmes towards the inclusion of individuals with disabilities (Moltzen, 2005a).

The move towards inclusion or the ecological paradigm suggests the primary challenges facing children with disabilities are external - within the environment, rather than internal - within the child (Davies & Prangnell, 1999; Moore, Anderson, Timperley, Glynn, Macfarlane, Brown & Thompson, 1999), and is the paradigm upon which New Zealand's special education policy, *Special Education 2000* is founded. Translated at the chalk-face, this should equate to classrooms being viewed much more as communities where all children have a right to belong, and where teachers provide differentiation to meet the wide range of learning needs in their classrooms (Moltzen, 2006). In New Zealand, the IEP can afford educators programme flexibility as it "is seen much less as an accountability mechanism and much more as a tool to ensure a programme of learning that is most appropriate for students with special needs" (Moltzen, 2005a, p. 157). The IEP is not a legal requirement unless a student is receiving funding via the Ongoing Reviewable Resourcing Scheme (ORRS), in which case the student is required to have a service agreement which links their identified resourcing requirement to their IEP (Ministry of Education, 1999; Moltzen, 2005a).

The IEP components

Partnerships

The IEP is intended to unite school staff, specialist support teams, parents, whanau and students, collaboratively working towards an effective means of identifying and prioritising learning goals (Ministry of Education, 1999). Yet, the success of the IEP process depends on commitment to listening and valuing all contributions (Ministry of Education, 1999). This undoubtedly involves the establishment of strong, collaborative relationships between home, school and community.

Macfarlane (2006) identifies the significance of networking in a tripartite system of inter-relational support between home, school and community, and terms this the 'educultural triangle'. Based on the fundamental principles of the Treaty of Waitangi - partnership, protection and participation - the educultural triangle reasons that inclusive settings promote a sense of community in which all members have the opportunity to contribute (Smith, Polloway, Patton & Dowdy, 1998). Features of the

educultural triangle include visibility of parents within a school, a sense of belonging for children and parents, and community meetings including orientation meetings and hui whereby consultation and collaboration are encouraged and welcomed (Macfarlane, 2006).

In their model for recognising, respecting and responding to diversity, the Ministry of Education (n.d., b) cite consultative and collaborative practices repeatedly as underscoring every aspect of effective school-wide special education support systems. In this model, staff and parents alike share vital information, consider options, enlist assistance, formulate action plans, monitor, review and evaluate progress (Ministry of Education, n.d., b). The model does, in fact, mirror the fundamental practices associated with the IEP process.

The team

The core team, as distinguished by the Ministry of Education (1999) consists of the student (where appropriate), the parents/caregivers, the classroom teacher and the key worker (any member of the IEP team who has key responsibility for the programme). The wider team comprises family and whanau support, (kaumatua, whanau, relative or parent advocate), other school personnel, a specialist teacher (such as the Resource Teacher: Learning and Behaviour), specialist service providers (such as Group Special Education), therapists (including speech language, occupational and physiotherapists), and the teacher aide.

Although inane to suggest otherwise, the importance of a core team collaboratively formulating the IEP can in no way be overlooked. Yet this approach differs considerably from the one taken in the United States, where until relatively recently, classroom teachers were not required to be part of the IEP team. Understandably, general education teachers expressed levels of disconnectedness between the IEP goals and the classroom programme, an inability to implement goals (due in part to the fact that they did not always receive a copy of the IEP), concern over issues of accountability of student progress, and a general perception that the IEP was designed to enhance special education, not general education (Menlove, Hudson & Suter,

2001). The results of a more current survey (Lee-Tarver, 2006) reveal that teachers are becoming more active and vocal participants in the IEP process, view IEPs as useful tools in planning and implementing goals for their students, and consider themselves involved in the goal setting process. However, the survey results indicated that more training was needed for regular education teachers on the purpose, development and implementation of the IEPs (Lee-Tarver, 2006).

Assessment

Crucial in both identifying students with special needs and the development of successful programmes for these students, assessment is the cornerstone of the IEP. Identified as a key component in the Ministry of Education's (2006) Personalising Learning initiatives, "good assessment provides feedback that improves learning outcomes and involves students in the process of learning" (n.p.). The Ministry of Education (1999) expresses some key principles of assessment as being:

- Explicit.
- In the best interests and progress of the student.
- Integral to the learning process.
- Multidimensional - taking many forms and gathering information from many context.
- Sensitive to diversity of belief systems and cultural expectations.
- Appropriate to the age developmental level of the child. (adapted from the Ministry of Education, 1999, p. 7)

The IEP meeting

Given the importance of the collective nature of the IEP process, certain considerations are worthy of deliberation if the IEP meeting is to be truly collaborative in practice. The Ministry of Education (1999) alerts us to the importance of consulting parents on their choice of venue, which could include the parent's home, the marae, school, community centre or the home of a family member or support person. Moltzen (2005a) suggests consideration be given to the number of participants attending the meeting so as not to intimidate the parents. Other key

practices should include: the setting of an agenda, informing participants of their roles at the meetings, attending to issues of privacy and confidentiality, the previewing of any information which is to be discussed at the meeting, and the allocation of a set meeting time. Of paramount importance, according to The Ministry of Education (1999), is that all team members feel that they have contributed and have been valued and included in the meeting process, together with the student, who should be included in all or part of the meeting whenever possible.

Roles and responsibilities

Lytle and Bordin (2001) advise that in order to meet the child's education needs, each person on the IEP team should play a specific and clearly defined role. Parents or caregivers, for example, possess an intimate knowledge of the child, and as such, will play a central role in the entire process. Yet arguably, the most vital role in the IEP team is that taken by the child him or herself. Although student participation at IEP meetings is rising, active participation is very minimal, the least practiced strategy being student-led IEPs (Mason, Field & Sawilowsky, 2004).

Student-led IEP meetings

One way to increase student responsibility in the IEP process is to have students lead their own IEP meeting. Mason, McGahee-Kovac and Johnson (2004) promote student led IEP meetings as a way of teaching students to take ownership of their own education, increasing self confidence and advocating for themselves. These writers believe children as young as six can competently lead their own IEP meetings. In their research involving more than 100 students with mild disabilities from a range of cultural backgrounds, Mason, McGahee-Kovac and Johnson (2004) found when students led their own IEP meetings, parental attendance and participation increased, as did support from general educators for the students with disabilities. Under the United States IDEA amendments of 1997, students aged 14 - 16 years must be invited to participate in their own IEP meetings. Yet Van Dycke, Martin and Lovett (2006) question why, once a student becomes a teenager, he/she would even want to participate in their own IEP, if up until that point they had never been invited to:

By the time that student becomes a teenager, they may have decided that IEP meetings are not important at all since no one has invited them or included them in the planning phase ... they make statements similar to ... “I do not know how to help with any of it; you have been doing it for me for all these years. Just keep on doing it without me”. (p. 43)

Given current educational trends towards the personalisation of learning, student-led IEPs may arguably be one effective step on the personalisation pathway.

Writing the plan

Although in New Zealand no standardised format exists for writing the IEP, principles tend to underscore the processes which largely reflect those set out in Public Law 94-142 (1975). The plan should feature long term aims (the ‘big picture’ of what is expected for the student over the next few years); short term goals (which are then broken down into specific learning outcomes in accordance with the New Zealand Curriculum Framework); a record of present skills, strengths and needs; and the identification of responsibilities towards the implementation of the IEP (Ministry of Education, 1999; Moltzen, 2005a).

The Ministry of Education (1999) proposes the following checklist as a guide towards the appropriateness of selecting short term learning goals:

1. Is this learning outcome closely related to the programme of the class?
2. Will this learning outcome help the student achieve the long term aim?
3. Does this learning outcome reflect the interests and priorities of the student?
4. Does this learning outcome reflect the priorities of the parents?
5. Is this learning outcome relevant to the student’s future learning?
6. Does the student need this skill on a daily basis?
7. Is this skill needed by the student in a variety of settings at school and out of school?
8. Does this skill fit the age and level of the class?

9. Has the student's rate of progress and previous time spent learning this skill been considered?
10. Will this skill help this student join with his/her peers?
11. Will this skill ensure that others treat this student appropriately?

Moltzen (2005a) concludes: "In the final analysis, the actual structure of the written plan should reflect the individual student and his or her strengths and needs" (p. 163).

Implementing the plan

Arguably, an IEP plan is only as good as the extent to which it is able to be implemented. A plan should be a 'living' document, utilised in the first instance by the classroom teacher who must translate the short term goals into specific teaching and learning strategies for the student. In so doing, adaptations may need to be made to the physical environment, the class programme, resources and materials, equipment, and personnel, including the use of the teacher aide (Ministry of Education, 1999).

The teacher aide

The crucial role played by the teacher aide in special education supports systems can in no way be overstated. Pivotal in supporting the classroom teacher in implementing the student's programme, the teacher aide is an invaluable source of expertise regarding the students with whom she or he works. Hauge and Babkie (2006) maintain that teacher aide expertise must be harnessed as a valuable source of knowledge, as often the teacher aide is in the position most likely to determine which academic and behavioural strategies are working and which are not. This may, in part, be due to funding methods, which in recent years have allocated specified teacher aide hours to individual students with special needs. This has led to a model where the teacher aide has worked on a one-to-one basis with the student. As such, the teacher aide has tended to be seen as 'belonging' to the student and responsible for the delivery of much of the daily instruction for that student (Ministry of Education, 1999). It is important to note, however, that a teacher aide does not generally have the training to develop individualised teaching strategies, nor to select

appropriate learning objectives (Ministry of Education, 1999), and as such, will require ongoing and specific feedback regarding progress with students, and often with their role generally (Hauge & Babkie, 2006).

Review and evaluation

The IEP process is indeed cyclic, and although review and evaluation signify the ‘end’ of the process, they are, in fact, just the beginning. Whilst teachers will invariably make modifications and minor adjustments based on student achievement throughout the duration of the plan, all IEPs should undergo formal review (Moltzen, 2005a). The formal review scrutinises three important aspects, as set out by the Ministry of Education (1999, p. 16), which act as a launch towards establishing future aims and goals:

1. Has the student achieved the learning outcomes?
2. Has the programme been appropriate in meeting the learning needs of the student?
3. How has the IEP process contributed to the outcomes?

The use of IEPs for gifted and talented students

Literature focussed around the utilisation of IEPs for gifted and talented students is meagre, to say the least. Whilst text books on educational practices for gifted and talented students tend to offer brief paragraphs, if not sentences to the use of IEPs, it is even more difficult to access whole books and articles devoted to this theme. References to the use of IEPs for gifted and talented children tend to articulate with those stated by Winner (1996): “IEPs are in theory excellent, as each child with an IEP is given a hand-tailored education. However, IEPs are extremely difficult to carry out well” (p. 256). Similarly, the Ministry of Education (2000), while promoting the use of IEPs for meeting the cognitive and affective needs of gifted students, is quick to qualify their use: “Planning, monitoring, and review are crucial to the success of IEPs. Effective IEPs require commitment and communication and can be very time consuming” (pp. 40-41). Other writers make ephemeral references to the use of IEPs for gifted students who have specific interests or abilities (Cathcart,

2005); for gifted students with social needs (Taylor, 2004); for gifted students possessing dual exceptionalities (McClure, 2006); and gifted students whose IEPs create issues resulting in court action (Stephens, 2000).

One explanation for this paucity in research may be due to the fact that in the United States, unlike children and adults with disabilities, gifted students have very little protection under state and federal law (Karnes & Marquardt, 1997, cited in Stephens, 2000; Shaunessy, 2003):

State policies in gifted education have never been cohesive, comprehensive, or consensual enterprise because, fundamentally, their development is nested within each state's governance ... Gifted education policy is tied to rules, statutes, codes, and regulations adopted by state legislatures, interpreted by state school boards of education and state departments of education and implemented by local school districts (Brown, Avery, VanTassel-Baska, Worley & Stambaugh 2006, p.11).

Thus, with no federal mandate requiring protection for gifted students, only a few states (nine out of 50) currently require IEPs for gifted students (Shaunessy, 2003). Although an IEP is a required provision in the United States for students with disabilities, "it has a limited following in the gifted provisions" (Shaunessy, 2003, p. 18).

IEPs and gifted and talented students: What should they contain?

It is recommend that as well as containing statements regarding the child's present levels of educational performance, assessment information and appropriate evaluation strategies to determine the student's progress, an IEP for a gifted child should also consider factors such as "the area and degree of giftedness, special abilities, specific deficits or disabilities, learning rates, and behavioural factors" (Whitmore, 1985, p. 2). Smith (2000) and Whitmore (1985) recommend that the IEP also include statements about educational requirements necessary to meet the unique learning

needs of the student, such as placement, pull-out programmes, acceleration plans, enrichment options, independent study and dual enrolment.

Renzulli and Smith (1988; 1993) developed a model for designing IEPs for gifted and talented students based on three underlying assumptions. First, many gifted students master the regular curriculum at a far greater pace than students in the general school population, and as such, it is important to provide some alternative means that will allow students to cover basic material at different rates and in ways that will “respect a variety of learning styles” (Renzulli & Smith, 1993, p. 1).

The second assumption is that gifted students should be provided with opportunities to “identify and to pursue advanced topics and areas that hold special fascination for them” (Renzulli & Smith, 1988, p. 34). These self selected areas are to be pursued in a manner of a firsthand inquirer, rather than a passive learner.

The third assumption underlying the model is that the major focus of IEPs for gifted students be placed on individual strengths rather than weaknesses:

Although no one would argue against a diagnostic/remedial approach to IEPs for handicapped children, our main concern with gifted students is not to find out what is wrong with them and fix them up! ... rather, to identify both general and specific strengths in higher levels of thinking, creativity, and task commitment and to provide opportunities for developing these strengths in relatively unstructured learning situations ... (Renzulli & Smith, 1988, p. 34)

To this end, Renzulli and Smith’s (1988; 1993) model is implemented by assessing the student’s strengths, compacting the curriculum whenever possible and making available learning experiences based on the student’s abilities, interests, and learning styles.

In addition to Renzulli and Smith’s (1988; 1993) emphasis on the identification of strengths, Cathcart (2005) expresses the importance of identifying the gifted student’s

'needs'. She explains that 'needs' emphasises that this is what we are actually talking about, and is not something extra or a 'perk'. 'Needs' may also comprise ability areas where extension is required, and include aspects of behaviour and relationships and learning skills in need of development, for example, time management and advanced research skills (Cathcart, 2005). Yet, with limited guidelines available on the use of IEPs for gifted and talented children, the field is 'wide open' for the creative interpretation and application of such plans.

Barriers to the implementation of Individualised Education Plans

Literature from the United States highlights several barriers to the successful implementation of IEPs. Such barriers include teacher 'disconnectedness' with the IEP process (Menlove, Hudson & Suter, 2001); lack of active student participation at their own IEP meetings (Mason, Field & Sawilowsky, 2004; Mason, McGahee-Kovac & Johnson 2004; Van Dycke, Martin & Lovett, 2006); parental frustration by perceptions of inequality on the IEP team (Lytle & Bordin, 2001); and a mismatch between IEP goals and the regular classroom programme (Smith, 2000).

Similarly, in their review of New Zealand IEPs, researchers Thomas and Rowan (1995, cited in Moltzen, 2005a) found many plans lacked essential content critical to their effectiveness, and a great disparity existed between various sections of the plans. There is a tendency, according to Moltzen (2005a) for the IEP to be viewed as a "separate, stand-alone entity" (p. 166), which has frequently resulted in few links between the regular classroom programme and the IEP. The challenge concludes Moltzen (2005a) is to de-emphasise the 'individual' aspect of the programme, which may have caused professionals to focus on exclusionary approaches, and to enhance inclusive practices. By their very nature, inclusive practices, while clearly pertaining to students with special education needs, must to be considered alongside the needs of another student population - the gifted and talented learners.

Section Five

The gifted and talented reader: A profile

The terms 'gifted student' and 'gifted reader' have tended to be used synonymously (Cramond, 2004). At one time, Cramond suggests, reading instruction for the gifted would have seemed a superfluous activity, as those students identified as gifted readers would, by their very nature, have had to have been gifted students. Entry into programmes for the gifted would have depended upon aptitude and/or achievement tests, and often these tests were highly reliant upon reading skills. As a result, teachers tended to nominate children as gifted, who were good readers, and therefore, successful at school. Indeed, research on intellectual giftedness appears to suggest that one of the most commanding indicators of exceptional giftedness is early reading. Gross (1999) cites both Terman (1926) and Hollingworth (1926, 1942) as reporting that it was early reading that most distinctly set highly gifted children apart from moderately gifted children in their studies.

Yet, Cramon (2004) cautions, a student can be gifted and not be a gifted reader (as evidenced in underachieving gifted students and/or those with learning difficulties). Equally, a student may be a gifted reader, yet not meet the requirements for placement into gifted programmes, such as not achieving the requisite score on an intelligence test. In New Zealand, however, there has been an increasing tendency to move away from single category definitions of the gifted and talented (such as high IQ) in favour of more multi-categorical definitions which acknowledge a varied range of special abilities (Ministry of Education, 2000). This has meant that gifted and talented readers are being recognised as exhibiting many unique characteristics of their own.

Although no common list of research based characteristics of the gifted and talented reader exists, anecdotal information gathered over the last two decades does identify some features of this population.

Dooley (1993) characterises gifted readers as having superior recall, persistent curiosity and an ability to understand complex ideas. These students typically read two years or more above grade level, read widely and possess advanced vocabularies. However, these characteristics may not be apparent when the gifted reader is required to work at the pace and level of less advanced readers (Davis & Johns, 1991, cited in Dooley, 1993).

Reis, Gubbins and Richards (2001) believe that talented readers are voracious, use multiple strategies to create meaning and have an extensive vocabulary, adding these students have the capacity to understand text information well above what would be expected of a person of that age (Mason & Au, 1990, cited in Reis et al., 2001).

Similarly, Catron and Wingenbach (2001) state that gifted readers “go beyond learning to read and instead, *read* to learn” (p. 135). These students have progressed beyond skill acquisition, having internalised their own word attack processes, and process text for immediate comprehension by employing “top down processing”, such as applying prior knowledge and making inferences (Catron & Wingenbach, 2001, p. 136).

Vosslamber (2002) parallels the characteristics of the gifted reader to the three aspects of giftedness that Renzulli (1978, cited in Ministry of Education, 2000) proposes: above average ability, task commitment, and creativity, in the area of reading. According to Vosslamber (2002) both cognitive and affective behaviours can be explained within Renzulli’s three circles framework. Cognitive behaviours relate to the above average ability of the gifted reader, and can be evidenced in his or her task commitment, and the affective behaviours (those more emotional aspects of giftedness) will mainly arise within the creativity circle. Vosslamber (2002) adds that just as there is overlap between Renzulli’s circles, so too is there overlap between the affective and cognitive realms. Thus, some affective behaviours may arise in areas other than simply creativity.

Catron and Wingenbach (2001) assert it is important to make the distinction between a good reader and a gifted reader. Hartley (1996) states that the literature on early reading, accelerated reading ability and precocious reading ability signals a degree of confusion among educators, who tend to use the terms interchangeably. The distinction, according to Catron and Wingenbach (2001) becomes apparent when the expected outcomes of the reading process are examined, as the gifted reader will quickly integrate prior knowledge and experience with text information, and comfortably and productively apply higher order thinking skills such as analysis, synthesis and evaluation. When such awareness of cognitive processing is applied to the reading task it is defined as ‘metacognition’. Gifted readers are “metacognitively aware of the activities incorporated and controlled within their reading process ...” (Catron & Wingenbach, 2001, p. 137).

Such cognitive processing has been labeled “metacognitive planning” by Abilock (2004, p. 8) and “expert thinking” by Block and Israel (2004, p. 1). This processing can be evidenced in the way highly able readers: adjust a reading goal according to their level of prior knowledge, think strategically, follow their intentions to the end of a passage, monitor their comprehension, and reflect on an author’s purpose within the constraints of a particular genre and their own reading objective (Pressley and Afflerbach, 1995, cited in Block and Israel, 2004). Accordingly, all readers should be able to use these strategies, although many less able readers will not do so unless their teachers proficiently demonstrate these thinking processes.

Recent research conducted at the University of Connecticut by Reis, Gubbins, Briggs, Schreiber, Richards, Jacobs, Eckert & Renzulli (2004) condenses many previously identified characteristics of the gifted and talented reader, into four main areas:

1. They enjoy the reading process.
2. They are early readers and may be self-taught.
3. They are at least two grade levels above their chronological grade placement.
4. They demonstrate advanced processing and advanced language skills.

The ‘advanced processing skills’ consist of many of the aforementioned characteristics, such as: the ability to retain large quantities of information for retrieval; the automatic integration of prior knowledge and experience into the reading experience; the automatic use of higher order thinking skills such as analysis and synthesis; and the ability to perceive unusual relationships and grasp complex ideas and nuances.

However, not all characteristics associated with precocious reading ability are constructive, nor are all reading experiences productive. Moore (2005) cites self criticism; inability to deal with failure; inappropriate behavioural outbursts and difficulty transitioning from subject areas among several negative characteristics of able readers. Halsted (2002) reports that young gifted readers may push themselves to read any text they can decode before they possess the emotional maturity to understand the material. Thus, precisely *because* of their ability, young gifted readers may experience great difficulty finding books that are both technically at the correct level and comparable to their emotional maturity and experience, resulting in a rather superficial reading experience (Cathcart, 2005; Crammond, 2004).

Catron and Wingenbach (2001) assert that gifted readers are often forced into underachievement by schools, as they plod along reading material “ridiculously below level” (p. 138). They add that teachers often respond to voracious reading habits by assigning written or oral book reports, which, unless accompanied by appropriate questioning strategies on the part of the teacher, are of little value. Taken to its logical conclusion, the prolonged mismatching of instructional reading programmes to the academic and emotional maturity of the gifted reader may well result in underachievement, and a diminished opportunity to learn how to react to challenge.

Underachievement defined

At first, the term ‘underachieving gifted student’ appears to be an oxymoron. One questions how a gifted student can fail to achieve, given ‘giftedness’ is commensurate with high levels of achievement. Yet, Whitmore (1986, cited in Reis & McCoach,

2000) suggests that frequently, students who show great academic promise fail to perform at levels consistent with their abilities, frustrating both teachers and parents. Hoover-Schultz (2005) suggests that alarmingly, estimates of high ability students who do not achieve are as high as 50 percent. The underachievement of gifted students represents not only a loss of valuable resources to society, but perhaps even more crucially, unrealised fulfillment for the individual student (Moltzen, 2004c; Israel, Sisk & Collins, 2007).

Defining underachievement in gifted students should be a relatively uncomplicated task, yet no universally agreed definition exists (Reis & McCoach, 2000). At its simplest level, underachievement can be described as the discrepancy between potential and achievement, or as Moltzen (2004c) terms “unfulfilled potential” (p. 372). As to why this phenomenon occurs, Reis and McCoach (2000; 2002) suggest that in the vast majority of cases, the underachievement of able students occurs for one of three fundamental reasons: (a) underachievement masks more serious physical, cognitive, or emotional issues; (b) underachievement is symptomatic of a mismatch between the student and his or her school environment; and (c) underachievement results from a personal characteristic such a low self-motivation, low self-regulation, or low self-efficacy. Moltzen (2004c) advises the literature in this area focuses on the home, the school and the individual as causation, but cautions they are not independent of each other, and the way these aspects interrelate will differ between individuals.

In this review, prominence is given to the role of the school, and in particular, the classroom teacher in meeting the needs of the gifted and talented reader, as a preventative measure to underachievement, for: “Underachievement may occur if academically talented students do not receive appropriate levels of challenge in core curriculum areas like reading” (Reis, Gubbins & Briggs, 2004, p. 335).

The need for intellectual challenge for the young gifted student can in no way be overstated. Gallagher’s (2006) study into school transition of gifted five year olds found that a lack of intellectual challenge impacted negatively on children’s’ self

concept, self esteem and patterns of behaviour leading to underachievement. This impact was so great, that by the age of seven, children's reactions at home to their schooling experiences were intense - tantrums, threats of running away from school and in one case, suicide.

Research suggests that some (most likely, many) talented readers have their academic needs ignored in the primary classroom:

Despite so many advances in technology and increasing knowledge about differentiation and curriculum, the research ... demonstrates how little some classroom teachers do to meet the needs of this group. When their academic needs are ignored, talented students' reading progress is stunted and their opportunities to learn how to react to challenge are diminished. Talented readers are left to develop and succeed on their own, as they need instructional support and curricular challenge that is different from strategies used with struggling students. (Reis et al., 2004, p. 315)

Clearly, without appropriate curriculum modification, the potential for underachievement in gifted and talented readers is very real indeed.

Differentiation for the gifted and talented reader: What do they need?

Cramond (2004) asserts, "It is no longer sufficient to assume that gifted students will be able to read well enough on their own" (p. 35). She claims reading instruction for the gifted is a complex teaching challenge requiring an understanding of both the needs of gifted students and the teaching of reading. Cramond (2004) proposes capable readers may need assistance in choosing appropriate literature, guidance in choosing books that help them deal with affective issues, and lessons incorporating higher order thinking skills. Abilock (2004) and Reis et al. (2004) believe independent project choices are critical for gifted readers, while Abilock, (2004) advocates for the use of mentors working with the gifted reader.

Indeed, exhaustive lists of programming principles and practices for the gifted reader appear repeatedly throughout the literature. Almost invariably, amongst the superfluity of suggestions, the following appear as the most apposite strategies and methods for differentiating the reading programme for gifted readers.

Inquiry reading: The process by which students conduct research on a topic of interest, developing reading and writing skills in a meaningful context (Abilock, 2004; Cathcart, 2005; Catron & Wingenbach, 2001; Dooley, 1993; Moore, 2005; Vosslamber, 2002).

Ability grouping and flexible grouping: Students are grouped for a variety of purposes, such as reading skills, reading needs, reading interests, learning styles and for socialisation (Crammond, 2004; Moore, 2005; Reis et al., 2001; Vosslamber, 2002;).

Critical reading guidance: Critical reading does not occur automatically, and advanced readers require instruction in six critical reading areas: inference, assumption, deduction, interpretation, prediction and evaluation (Crammond, 2004; Dooley, 1993; Reis et al., 2004; Vosslamber, 2002). Opportunities during reading which promote rich, complex, multiple interpretations of literature encourage students to examine their own beliefs, and “provides challenges that talented readers rarely encounter in their classrooms” (Reis et al., 2004, p. 335).

Higher-level or higher order thinking skills (metacognitive skills): Such skills as those advanced by Bloom (1956) encourage students to interact at a deeper level with texts (Abilock, 2004; Catron & Wingenbach, 2001; Crammond, 2004; Hartley, 1996; Moore, 2005; Vosslamber, 2002; Winebrenner, 1992).

Creative reading skills: This involves the synthesis, integration, application and extension of ideas, and may be expressed through drama, dance, music and the visual arts (Catron & Wingenbach, 2001; Hartley, 1996; Vosslamber, 2002).

Guidance on choosing books: Gifted readers do not necessarily select high quality literature, and may require adult guidance in selecting appropriate material that not only appeals to the reader, but challenges as well (Crammond, 2004; Halsted, 2002; Hartley, 1996; Vosslander, 2002). Reis et al. (2004) assert talented readers are not only hurt by reading material that is consistently too easy for them, but obstructed from making reading progress unless they are given the opportunity to interact with appropriately complex texts.

Differentiation for the gifted and talented reader: What is actually happening?

Despite this extensive inventory, recent research from the United States suggests minimal (if any) differentiation of the reading programme in nine of the 12 elementary classrooms observed (Reis et al., 2004). The research reports “no challenging reading material or advanced instruction was provided during regular classroom reading instruction” (Reis, et al. 2004, p. 315). This finding is substantiated by the Progress in International Reading Literacy Study (PIRLS, 2001). In their international comparative study of reading achievement at the Grade 4 (Year 5) level, PIRLS (2001) reported “generally in classes internationally, the same reading material was being used by students regardless of their reading level, but with students reading at their own speed” (Ministry of Education, 2003), while the preferred teaching approach, internationally, was to teach students in a whole-class setting, as opposed to groups (Ministry of Education, 2003).

Certainly, in the United States, despite the growth of alternatives, the traditional means of reading instruction during the elementary years tends to be the basal reading series, with estimates as high as 80-90 percent of class reading programmes using this approach (Robinson, Shore & Enersen, 2007). Such approaches, however, do not provide modifications radical enough for the gifted reader. Robinson et al., (2007) call for administrators to recognise that talented readers do not “need to jump the hurdles of the grade-level reading curriculum” (p. 160), and as such, require access to advanced materials and grouping opportunities that are appropriately challenging for these students.

By contrast, PIRLS (2001) found that in New Zealand and Scottish classes, different reading materials were used according to the reading level of the students, and students tended to be organised into same-ability groups for reading activities (Ministry of Education, 2003). While it is a truism that New Zealand students achieve significantly higher than the international average in reading literacy (Ministry of Education, 2003), it warrants suggestion that the presentation of such statistical data may well offer a ‘false sense of security’ in our ability to teach reading, for although the study measures what students have achieved, it cannot measure *potential* achievement. In the case of the gifted and talented reader, this is significant, for there is no way of knowing at which point, or for how long the gifted reader has been achieving at the level measured. In short, a Year 5 gifted reader may well have ‘met the mark’ some months (most likely, years) earlier. Little wonder, perhaps, that some gifted readers express frustration over their class reading programme.

Implications for classroom teachers

In her small scale New Zealand study of the self perceptions of gifted readers, Hartley (1996) discovered that generally, frustrations regarding reading at school arose from “the short sessions allocated to reading, lack of privacy, interruptions, classroom noise, insufficient reading material available for particular needs, and directed reading and discussion in mixed ability groups” (p. 261). All subjects in Hartley’s study stated they enjoyed reading at home more than at school, due to the large blocks of uninterrupted time to pursue their personal reading interest. Hartley (1996) advocates for a regular time committed to sustained reading with minimal distractions each day, a place for individuals to escape into books, a time for students and the teacher to talk about books formally and informally, and planned teacher modeling of ways of responding to books. Significantly, Hartley (1996) contends, genuine, collaborative parent teacher partnerships must be encouraged in order to make the connections between home and school reading which “support and extend the special talent of the gifted readers and provide comprehensive monitoring of this talent” (p. 267).

One such tool in the construction of collaborative parent/teacher partnerships may well be the Individualised Education Plan (IEP).

Conclusion

From ancient Sparta to the 21st century, definitions of the gifted and talented reflect societal values and as such, undergo continual transformation. Modern day approaches to gifted and talented education tend to favour more multicategorical definitions, such as those proposed by Gardner's Multiple Intelligences model. Such theories find favour with educators, certainly in New Zealand, for they reflect our inclusive rather than exclusionary approaches to education.

Gifted and talented children are patently different from other students and often appear 'out of step' with their same age peers, perhaps even in conflict with the 'regular' curriculum and its instructional delivery. Accordingly, they require a differentiated programme, one whereby the content is sufficiently accelerated and enriched to provide for the necessary level of challenge and choice.

Stemming from the English construct, personalising learning is the Ministry of Education's (2006) latest initiative towards enabling teachers and students to learn in meaningful ways. Learning is described as a deeply personal experience, whereby the learner discovers for themselves, reflects on what they learned and how, and sets new goals. Importantly, learning involves creative and social interaction; it does not necessarily mean 'individualised' or exclusionary learning.

One existing framework which appears to encompass both the personal and inter-personal philosophical underpinnings of personalising learning is the IEP. Viewed largely as an assistive tool in the design and implementation of appropriate learning programmes for students with disabilities, the IEP, both its principles and processes, reflect the collaborative and consultative approaches to New Zealand's inclusive special education. Although the IEP is advocated for use with gifted and talented students, it has been regarded as time consuming, requiring commitment and communication between all parties.

The gifted and talented reader exhibits many unique and exceptional characteristics. Described as ‘metacognitively aware’ of the abilities they possess, gifted readers necessitate differentiated programmes featuring both challenge and choice, for when their academic needs are ignored, the reading progress of gifted students is stunted and their opportunities to learn how to react to challenge are considerably weakened.

In examining the literature in five main areas, this review has sought to reveal the connectedness between giftedness, in particular, the gifted reader, and the necessity, indeed, obligation of educators to differentiate learning programmes. The IEP, its principles and processes has been scrutinised, and its worth as an assistive tool in planning and implementing appropriately personalised learning programmes is considered in the results and discussion chapter.

Chapter Three

Methodology

Introduction

This chapter outlines the context of this action research project by providing a brief overview of the researcher's background, interest in the topic and the development of the research questions. A summary of the characteristics of research, and in particular, educational research is offered, and both quantitative and qualitative research approaches are explained. The action research methodology is defined, its appropriateness for this project stated, and characteristics of the action researcher are explored. An overview of the research sample is provided, and finally, data collection and analysis techniques are discussed, and issues of reliability and validity are discussed.

The research in context

Having taught a diverse range of New Zealand junior school children for 14 years, I believed I possessed a reasonably well developed awareness of the fundamental practices associated with literacy programmes in our schools. Like most New Zealand teachers, my training emphasised practices such as grouping students according to reading ability and needs (Department of Education, 1985; Ministry of Education, 1996; Ministry of Education, 2003). Yet recent personal experiences led me to question the feasibility of this approach, when I encountered a class of Year Two students with reading ages spanning some 10 years. While I found myself well supported in my attempts to cater for the literacy needs of the 'lower ability' children in my class, (through specialist intervention personnel such as RTLBs and intervention programmes such as Reading Recovery), I was at a loss as to how to meet the needs of a young gifted reader, who was reading several years above his classmates.

As previously alluded to, an all too apparent mismatch had occurred between my personal beliefs about teaching and learning, and what was taking place in my

classroom. I did not witness the type of ‘meaningful learning’ which I so believed was the right of every student in my class, and I became increasingly troubled by this disparity. Holly, Arhar and Kasten (2005) encapsulate my sentiments when they write:

According to John Elliot (2003), action research starts with a feeling – a sense of frustration, or, better yet, a sense of creative possibilities for action, and the pronounced commitment to ‘do it differently,’ to bring one’s practice in line with one’s values and aspirations. (p. 5)

The development of the research questions

Mutch (2005) states it is the researcher’s world view, the set of over-riding assumptions which drive the research process, determining the research question, methodology and methods of data collection, and ultimately determining the kind of new knowledge produced. My background studies in special education had led me to consider the possibility of implementing a framework such as the Individualised Education Programme that could assist teachers in personalising reading programmes for young, gifted readers.

Although IEPs are traditionally used for students with special education needs, and most commonly viewed as assistive tools in the design and implementation of inclusive learning programmes (Moltzen, 2005a), I considered the IEP principles and processes to be consistent in what I was seeking, by:

- Defining and setting goals for the able reader.
- Giving a voice to the able reader about his/her reading needs, interests, experiences, and goals.
- Regularly assessing existing goals, and where appropriate, implementing new ones.
- Creating the opportunity for parents/caregivers to share their expertise regarding their child.
- Supporting the classroom teacher with a specific plan for the gifted reader.

- Enlisting the support of gifted and talented advisors.
- Delegating roles and responsibilities to interested parties.
- Creating a collaborative, mutual approach towards meeting the needs of the young, gifted reader.

As a notable gap exists in the literature documenting instances where IEPs have been used as assistive tools towards programme planning for gifted students, this research study sought to answer these questions:

- Is the IEP an effective tool in assisting teachers towards differentiating reading programmes for young, gifted readers?
- If so, what particular features of the IEP prove beneficial in assisting teachers towards differentiation of reading programmes for young, gifted readers?
- How well do the principles and processes associated with the IEP align with the Ministry of Education's (2006) personalising learning initiatives?
- What are the shortcomings in the use of IEPs towards the differentiation of reading programmes for young, gifted readers?

What is research?

Given our seemingly innate curiosity regarding our world, humans seek explanations. "Research is one of the key ways we investigate phenomena (items of interest) and reduce vast amounts of data to manageable and relevant understandings - often called generalisations" (Mutch, 2005, p. 16). Research then, by definition, is concerned with purposeful, systematic investigations, in order to solve a problem, illuminate a situation or add to our knowledge (Stringer, 2004).

Educational research

What distinguishes educational research is its focus on people, places and processes broadly related to teaching and learning (Picciano, 2004). It is, as Picciano (2004)

explicates, “the careful systematic investigation of, or ‘travelling through,’ any aspect of education” (p. 2).

Educational research falls under the broad umbrella of social science research, which includes not only education, but health, business studies, social work, housing and media studies, each drawing on different disciplines, such as psychology, sociology, economics and politics (Denscombe, 2002). The diversity of such disciplines gives rise to varying viewpoints, styles, traditions and approaches to methods of data collection. Yet, generally speaking, there are two main approaches to research, commonly known as quantitative and qualitative approaches.

Quantitative research

Quantitative research, is grounded in scientific traditions, and is concerned with the collection of facts, and studying the relationship of one set of facts to another (Bell, 2005; Mertler, 2006). It tends to use methods that gather numerical data in order to make broad generalisations, such as surveys and questionnaires. Quantitative research uses deductive logic, that is, it generally begins with an idea (hypothesis) and gathers evidence to prove (or disprove) it (Mutch, 2005). Its research design is linear, and the researcher approach is detached and (seemingly) objective.

Qualitative research

By contrast, the key philosophical assumption underpinning qualitative research is that reality is constructed by individuals interacting in their social worlds. Lankshear and Knobel (2004) explain that a major reason for the development of the qualitative research approach is that researchers often want to understand the world from the perspective of other people. They are “interested in understanding the meaning people have constructed, that is, how they make sense of their world and the experiences they have in the world” (Merriam, 2001, p. 6). Qualitative research gathers data such as peoples’ stories, descriptions and opinions. It necessitates the collection and analysis of observation notes, interview transcripts and journal entries (Mertler, 2006). Qualitative approaches use inductive logic, whereby categories or

theories arise out of the data, and are often written in first-person, using narrative techniques (Mutch, 2005).

As this research project was to focus on teacher, student and parental interpretations and perspectives regarding the efficacy of using the IEP for young, gifted and talented readers, the qualitative research approach would prove most applicable in an effort to “examine the situation through the eyes of participants rather than the researcher” (Cohen, Manion and Morrison, 2000, p. 22).

The research methodology: Action research defined

Schmuck (2006) describes action research as: “A planned inquiry, a deliberate search for information, perspectives, or knowledge” (p. 29). Unfolding through a continuous cycle of reflecting, planning, data collecting, analysing, replanning and so on, action research seeks out alternative practices to improve outcomes. For Schmuck (2006) action research is:

- *Practical.* Insights obtained from data lead to practical and immediate changes in practice.
- *Participative.* Data is collected about real issues by teachers, students, administrators in collaboration and cooperation.
- *Empowering.* All participants influence and contribute equally to the research process.
- *Interpretive.* Social realities, perceptions and attitudes are shared by participants.
- *Tentative.* Inquiries do not result in right or wrong answers but rather with tentative solutions based on participants’ views.
- *Critical.* Practical improvements to situations are sought, and participants act as self-critical change agents.

Stringer (2004) extends this vision by adding that the systematic processes of action research enables educators to “come to grips with significant problems in classrooms and schools that seem impervious to solutions provided by a teacher’s regular

professional stock of knowledge” (p. 6). He adds that the processes of action research are particularly relevant when educators face long-term, deep-seated problems necessitating significant changes to existing programmes and practices.

Mertler (2006) writes that of equal importance, educators must understand what action research *is not*. The following abridged points summarise Mertler’s (2006) views:

- Action research is not the usual thing teachers do when thinking about teaching; it is more systematic and collaborative.
- Action research is not simply problem solving; it involves the specification of a problem, the development of something new (in most cases), and critical reflection on its effectiveness.
- Action research is not done ‘to’ or ‘by’ other people; it is research done by particular educators on their own work.
- Action research is not simply implementing predetermined answers to educational questions: it explores, discovers, and works to find creative solutions to educational problems.
- Action research is not a fad; teaching has always examined instructional approaches and their effects on learning. Teachers have seldom referred to this process as research, but the observation, revision, and reflection process is exactly what research is.

What does it mean to be an action researcher?

Ethical commitment

Holly, Arhar and Kasten (2005) maintain that commitment to democratic principles and professional practice must act as the foundation to any action research project. A researcher may seek to ask: “How best can I serve the students I teach? How can I improve my practice? ... Does this curriculum privilege a few at the expense of others?” (p. 40). Whatever the question, the researcher is driven to examine the social consequences of teaching practice, and in so doing, seeks to engage processes

of inquiry that are democratic, participatory, empowering, and life enhancing (Stringer, 2004).

Collaboration

In action research, many aspects of the process are open to collaborative practices. This involves, according to Cresswell (2005), establishing cooperative relationships, communicating in a sincere and appropriate manner, and including all individuals, groups, and issues.

Stringer (2004) is clear that all stakeholders whose lives are affected by an issue “need to be incorporated in the search for solutions to that issue” (p. 33), for action research seeks to make use of the “deep seated and extended understanding people have of their own situations” (p. 35). It is precisely by engaging in dialogue and discussion with others that allows the action researcher to not only access a larger pool of knowledge, but structure the basis for learning communities which may have dramatic transformative potential (Stringer, 2004).

Critical thinkers

Action researchers may well be described as critical thinkers. Brookfield (1984, cited in Holly, Arhar & Kasten, 2005) explains that taking the risk to think critically, although often resulting in frustration, perplexity, and anxiety is one of the most powerful activities of adult life. Action researchers see the future as open to their influences, and have confidence in knowing that the actions they take have arisen from beliefs which have been carefully analysed and tested against reality, in other words, from critical inquiry (Holly, Arhar & Kasten, 2005).

Reflective practitioner

Parsons and Brown (2002) explain the systematic reflection on our teaching can provide us with the impetus and means for improving practice: “As teachers, we may want to believe that we have mastered our professions. The truth is that we need to reflect on our actions and the consequences of those actions” (p. 6). Yet of itself, mere reflection is not enough. It is when we reflect on what has occurred, what

resulted and then ask “what if” and implement innovations, that the reflective practitioner becomes the action researcher (Bennett, 1994, cited in Parsons & Brown, 2002). It is the conscious and constant cycle of observation, reflection and new action, or what Stringer (2004) terms the “look-think-act” (p. 45) process which determines the action researcher.

In sum, Stringer’s (2004) definition illustrates precisely my predicament, as my “professional stock of knowledge” (p. 6) had been exhausted, and I sought to understand how to implement differentiated learning programmes for my gifted readers. The practical, participative and critical aspects of the action research methodology appealed as a means of exploring my ideas and hopefully, aligning my practices with my philosophies.

Reliability and validity

Imperative to all research, reliability and validity act to reassure the reader that the research is not based on poor data or erroneous interpretations. Mutch (2005) explains that reliability means you or someone else would be able to replicate your study with similar results. Essentially, reliability focuses on the constancy of results across time, settings, and samples (Cohen et al., 2000; Stringer, 2004). Bogdan and Biklen (1992, cited in Cohen, Manion & Morrison, 2000) advise that in qualitative research reliability may be thought of as “a fit between what researchers record as data and what actually occurs in the natural setting that is being researched, i.e. a degree of accuracy and comprehensiveness” (p. 119).

Validity means that a study actually measures what it set out to measure (Mutch, 2005). Yet because qualitative methods are essentially subjective in nature, procedures for assessing validity are quite different to those used in experimental research. Lincoln and Guba (1985, cited in Stringer, 2004) suggest that because there can be no objective measure of validity in qualitative research, the underlying issue becomes one of establishing trustworthiness. Mertler (2006) describes three common practices associated with qualitative research study that can help ensure the trustworthiness of the data. The first of these is *triangulation*.

Triangulation involves the use of multiple methods of data collection. In this way, a comparison of findings can occur enabling the researcher to clarify meaning by identifying different ways the experience is being perceived (Stake, 1994, cited in Stringer, 2004). In this research project, in-class observations were triangulated with focus group meetings and semi-structured interviews as a means of cross-checking data for accuracy and precision.

A second practice which can help ensure the quality of data is known as *member checking*. Mertler (2006) describes this procedure as one of sharing interview transcripts, observation notes and drafts with research participants. The sharing of this data allows participants to check that their thoughts have been represented accurately. In this research project, my initial observations helped to form the basis of focus group discussions, thereby offering participants the opportunity to add clarification to my observations if necessary. Each participant received a transcript of their individual interview, with the opportunity to review and amend its contents if they so decided it did not accurately reflect their thoughts. Similarly, each participant kept a reflective journal, a record of their thoughts and understandings throughout the research project. This served as a useful means of clarification and elucidation and acted too as a means of triangulation against the interview and focus group data.

A third procedure endorsed by Mertler (2006) is known as *prolonged engagement and persistent observation*. This idea is based on the premise that the longer you spend ‘in the field’ the more you develop trust with your participants, and learn the culture of their setting. Throughout my research study, apart from the planned observations, focus group meetings and semi-structured interviews, I attended several morning teas, an inquiry learning open afternoon, a staff meeting, an end of the year concert, a session I had arranged with a gifted and talented education advisor to speak with the participants, and observed alongside one of the participants as the deputy principal conducted a lesson on higher order thinking skills. All these instances provided me with opportunities to “observe patterns of behaviour to the point of being routine” (Glesne, 1999, cited in Mertler, 2006).

Ethical considerations

The principles of informed consent, confidentiality and the intended use of the information permeate all research. To insure all ethical issues were wholly considered and fully explored, an ethics application was submitted to the University of Waikato's School of Education Ethics Committee prior to any research being undertaken. Once approval had been obtained, the principal, teacher participants, children and their parents each received copies of information letters outlining the nature of the research, and accompanying consent forms (Appendices A, B, C, D, E,F). Once I was in receipt of all consent forms, the data collection commenced.

Interview transcripts were given to teacher participants for their consideration and to edit as necessary. All participants were aware of their right to withdraw from the research project anytime up to the point of data analysis. At the conclusion of the research project, all participants received a covering letter of thanks and a two page summary of the main findings of the research.

The participating school, management, teachers, parents and students have not been identified in this written thesis. Pseudonyms have been used throughout this script.

Selecting the research context

The research project was designed to involve four teachers from the junior school area within the same school to participate in a 'shared' research experience. In so doing, I anticipated this would assist in the free flow of information between the participants, in a collegial, communal culture. Action research includes participatory approaches to decision making, shared values, beliefs and goals, and equal rights of participation in discussion (Cohen et al., 2000). It was important that all participants would be equal 'players' in this action research process. Therefore, the school I selected would have to have a junior department large enough to allow four teachers working at approximately the same year level to participate.

I was aware of the degree to which this action research project would necessitate several visits to the school, and my original research design reflected a specific

number of school visits. However, I was aware too that this action research project warranted flexibility of structure, that is, the frequency and duration of my visits would depend very much on the nature of my involvement with the teachers. Therefore, I sought to undertake the research in a school within reasonably close proximity to my residence, carefully considering the constraints of time and accessibility.

Given the nature of the research project, I deemed it appropriate that I approach schools that had undergone some staff development in gifted and talented education, and who would have an understanding of their school's definition of gifted and talented students, and some understanding of the principles of curriculum differentiation for gifted and talented students.

Selection of participants

I approached the principal of an urban, decile five, contributing, primary school, with a roll of 455 students, and a teaching staff of 20. The principal was given a letter outlining the nature of the research and seeking approval for teachers to participate in the research (Appendix A), and an accompanying principal consent form (Appendix B). He agreed to my undertaking the research within the school, but explained that the staff had not undertaken any gifted and talented staff development as such. However, they were currently involved in a two year inquiry learning project, of which this was the second year. Both the principal and I felt that features of this staff development would align well with my research project, in particular, the personalising learning aspect. I had originally planned to speak to the junior school department, outline my research and request participants, but the principal said he would approach four staff members.

The four teachers were each given a letter outlining the research and inviting them to take part (Appendix C) and each received an accompanying teacher consent form (Appendix D). The teachers subsequently agreed to take part in the project. Of the four teachers, two taught in the Year Two area, one in a Year Three class, and one, a New Entrant teacher, was about to commence teaching this class within a week.

At the initial meeting with the teacher participants, they were asked to identify one child from their class to take part in the research. Teachers were then given a parent/caregiver and child information letter outlining the nature of the research (Appendix E) and an accompanying consent form (Appendix F) which they then forwarded to the parents of the child participants.

Data collection methods

Methods are the strategies or particular process used to gather one kind of data (e.g., interviews, observations, and surveys). Confusingly, the literature often uses these terms interchangeably, or replaces them with terms such as paradigm, research approach or research style (Mutch, 2005). Yet, just as there is no ‘best’ research paradigm, there is no ‘best type’ of research method, only good questions matched with appropriate procedures of inquiry (O’Leary, 2004). In so pairing the situation with the method, it is hoped the resulting data will yield rich, reflective insights on behalf of the respondents.

This research project utilised a combination of in-class observations, focus group meetings, IEP meetings, semi-structured interviews, reflective journals and informal visits to the school and classes as a means of both data generation, and importantly, an assurance towards reliability and validity. The participant involvement schedule comprised of:

- Keeping reflective journals throughout the study.
- Three scheduled focus group meetings at approximately weeks one, three and 10 of the study.
- Two classroom observations with each teacher at approximately weeks two and nine of the study.
- One 50 minute audio-taped individual teacher interview at the conclusion of the study.
- Two IEP meetings per student participant, one at the commencement and one at the conclusion of the study.

1. Journals

The teacher participants in the study were encouraged to keep reflective journals. Mertler (2006) views teacher journals as an opportunity to maintain narrative accounts of professional reflections on practice. He explains that journals can be an ongoing attempt by teachers to reflect not only observations, but feelings and interpretations associated with those observations.

At the commencement of this project, I was able to share with the teachers my intention to keep my own reflective journal. I anticipated the purpose of our journals to be twofold: in the first instance, they could serve as opportunities to record our thoughts, feelings, opinions, judgements, concerns, and epiphanies. In addition, the journals could prove to be rich sources of data which could be utilised as catalysts for discussion points, ways of tracking successful (or otherwise) strategies, vents for our frustrations, and records of our celebrations. I explained that the journals would be used as reference material, and made available to myself at the conclusion of the study, and that the original journals would be returned to the participants at the conclusion of the project.

2. Focus group interviews

Stringer (2004) explains that in recent years, focus groups have evolved as a useful way to engage and involve participants in sharing information and in ‘triggering’ new ideas and insights. Focus groups may be thought of as a group interview whereby questions provide a stimulus for people sharing their experiences and perspectives, although the goal of the focus group interview is to generate discussion as opposed to question and answer responses (Lankshear & Knobel, 2004). According to Mertler (2006), interactions among focus group members may be extremely enlightening, as people tend to ‘feed off’ each others comments. Yet, Mertler (2006) cautions, when conducting focus group interviews it is vital participants are afforded equal opportunities to speak, for there is often a tendency for one or two members to dominate the discussion.

Stringer (2004) points out that the size of the focus group is an important consideration, with four to six being the optimal number to enable everyone to participate effectively. Other worthy considerations are the interview time and venue, for rushed meetings during recess or in rooms where others can overhear will limit the information shared (Stringer, 2004). Certainly, the focus group interviews conducted in this research project were conducted at mutually agreed times (after school) and in empty classrooms. Participants were issued with an agenda prior to each meeting, which signified the nature of the meeting, and served as a discussion prompt.

3. *Observations*

The primary purpose of observation is to familiarise the researcher with the context in which issues and events occur. Stringer (2004) suggests this allows the researcher to come to a “deeper level of understanding through extensive immersion in the context and interaction with people and events within it” (p. 80).

Undoubtedly, this was experienced first hand in this research project, as the opportunities I had to observe the participants and their classes provided me with invaluable insights into classroom culture and pedagogical practices. Such observations helped to serve as discussion points in our focus group meetings, and ultimately led to the exploration of several differentiated teaching strategies. During all classroom observations, one underlying question, as suggested by Stringer (2004) served to focus my observations: “What do I need to know about this school/classroom to understand the issue investigated?” (p. 81).

The classroom observations were recorded in the form of field notes. Field notes are written observations of what is happening in the classroom (Johnson, 2005, cited in Mertler, 2006). While it can be overwhelming to record everything seen, especially when trying to determine what is important, Johnson (2005, cited in Mertler, 2006) advises researchers simply “stop thinking and write what you see” (p. 93). In so doing, the researcher is drawn to record data that is interesting or important, and as

observations are made over time, patterns emerge from the data collected (Mertler, 2006).

4. *Semi-structured individual interviews*

The research interview seeks to gather data through the direct verbal interaction between persons. The literature presents a plethora of interview types, ranging from the highly structured, standardised quantitative interview, (possibly enlisting multiple researchers, for instance, telephone interviews), to the more semi-structured, informal, open-ended qualitative interview (such as used in classroom-based, action research), to the totally unstructured, anthropological and ethnographic interview, (whereby the researcher is fully embedded in the subject). Yet whatever the approach, it appears the key lies in what Cohen et al. (2000) term, “fitness for purpose” (p. 270). Certainly, for the purposes of this research project, I deemed the semi-structured interview a useful tool towards the collection of non-standardised, personalised information.

The inherent strengths of this approach lay not only in its potentiality for in-depth responses, but in its flexibility, which presumably, permits the interviewer the opportunity to probe for clarity or re-phrase questions to ensure comprehension. However, as with all interview methods, it is not without weaknesses.

It appears a strange contradiction that the very channel to rich data collection can also prove the greatest blockade - the interviewer. Petrie (2005) highlighted several flaws in both her interview schedule and interviewing technique as she lamented ‘lost moments’ during her semi-structured interviews. Petrie’s desire to gain consistent data which supported her assumptions resulted in the interview schedule being used as a series of questions which needed addressing, with no scope for the participants to generate discussion outside of the set themes: “The constraints of my assumptions, and desire to gain ‘good’ data that supported these assumptions, meant that my interviews became surveys where the participants became the vehicles for obtaining data” (p. 110).

Unquestionably, “the interviewer needs to develop the duality of being both present and meta-present in order to listen carefully in the moment and simultaneously consider and respond to the fruitful leads that emerge” (Fraser, 2005, p. 5). Thus, the semi-structured interview, whilst potentially affording the interviewer great freedom of exploration, is highly prone to researcher subjectivity. From interviewee misconceptions to inappropriate interview settings; from assumptive leading questions to the locus of power and control, interviews by their very nature are fraught with elements of bias.

In an attempt to lesson the likelihood of researcher bias, and in an effort to maximise validity, I sought to compose questions in such a manner that they did not convey any personal prejudice, and were open-ended enough to allow participants to tell their own story, to invite reflection and offer opinion (Appendix G). In addition, the schedule had to remain sufficiently open-ended to enable re-ordering, digressions, expansions, and new investigations throughout the interview process if necessary (Cohen et al., 2000). Of equal importance, I believed it necessary to allow each participant time to reflect on the research experience before the interview was conducted, and to this end, each participant was given a copy of the research questions in advance of the interview. A further consideration was the booking of an interview room within the school; a sound proof, comfortable room in which to conduct the research, uninterrupted.

Data analysis techniques

Detailed records covering the entire research process were kept throughout the research project. The keeping of such comprehensive accounts undoubtedly assisted in the data analysis, whereby a systematic, theme based approach was utilised. As the quintessence of the qualitative research lies in its ability to communicate its own messages, perhaps the most vital aspect of thematic analysis is to approach the text with an open mind; to let it ‘speak for itself’ by identifying the text’s key messages (Mutch, 2005):

Identifying salient themes, recurring ideas or language, and patterns of belief link people and settings together is the most intellectually challenging phase of data analysis and one that can integrate the entire endeavour. (Marshall & Rossman, 1999, cited in Mutch, 2005, p. 176)

The data in this research project was analysed in a manner similar to the following (condensed) process suggested by Mutch (2005):

1. *Browse*: skim read each section and try to see what the document is telling you.
2. *Highlight*: read closely, highlight repeated concepts, words, images, metaphors, contradictions.
3. *Code*: write key words or themes in the margin, thereby determining categories.
4. *Group and label*: look for patterns, similarities, and different ways you can group your codes and themes.
5. *Develop themes and categories*: what bigger themes are apparent? Do they suggest a particular format, matrix, timeline, flow diagram?
6. *Check for consistency and resonance*: look back on the original text. Do the identified themes seem valid and consistent? Would they ‘resonate’ with other relevant theoretical literature?

Timeframe of the project

The research project took place over a six month period, from June 2007 to December 2007. As a result of the responsive nature of this project, there were several alterations to the original timeline. The overview of the key events is set out as follows:

Term Two

End of June 2007

- Ethical approval was received from the University of Waikato.

- Initial contact was made with the principal of the participating school, and the introductory letter (Appendix A) and consent form (Appendix B) were given.
- The principal agreed to participate in the project, and the consent form (Appendix B) was received.
- The principal approached four teachers who subsequently agreed to participate. The teachers were given introductory letters (Appendix C) and consent forms (Appendix D).
- We agreed to meet after the Term Two holiday break, where I would outline the nature of the project more fully.

Term Three

July 2007

- Informal meeting with the teachers and introductions made.

August 2007

- First formal meeting to outline the nature of the project, discuss roles and clarify any aspects of the project. Consent forms were received.
- First Focus Group meeting. The characteristics of gifted and talented children were discussed, and our understandings of the Individualised Education Programme and Personalising Learning were shared.
- Parental and child participant permission sought and obtained (Appendices E & F).
- First in-class observations were undertaken.
- Second Focus Group meeting. De-briefing discussions and strategy sharing begun.

September 2007

- First Individualised Education Programme meetings undertaken.
- Session with the Gifted and Talented Advisor and the participants undertaken.

Term Four

October 2007

- Session with the Deputy Principal and the participants observing a ‘thinking skills’ lesson.
- Teaching sessions modelled by myself on the use of the three level guide to questioning.

November 2007

- Focus Group Meeting three. The implementation of the IEPs discussed and further strategy sharing undertaken.
- Final in-class observations.
- Final IEP meetings.
- Individual semi-structured interviews held (Appendix G).

December 2007

- Transcripts of taped interviews delivered to participants for their perusal.
- Transcripts received.
- Data analysis begun.

Conclusion

The action research methodology may be described as a process of systematic inquiry, the purpose of which is to provide educators with the kind of new knowledge and understanding to enable them to improve educational practices or resolve significant issues in classrooms and schools (Stringer, 2004). For this action researcher, the mismatch between personal teaching and learning philosophies, and what was actually taking place in the classroom, necessitated the search for possibilities, which generated the research questions and in turn, determined the research process.

In discussing the action research process, the characteristics of the action researcher can in no way be overlooked, for the action researcher must seek to engage ethical, democratic, participatory and empowering process of inquiry. In this research project a variety of data collection methods were utilised, including journals, focus group interviews, observations and semi-structured interviews, which assisted in providing

'patterns of behaviour', and helped to ensure issues pertaining to reliability and validity were given due consideration.

By its very nature, action research warrants flexibility of structure, for although all participants are considered equal 'players' in the process, the level and degree of involvement by the researcher will be, to a large degree, determined by the participants. Therefore, careful consideration must be given to the constraints of time and accessibility. For this project, a primary school within close proximity of the researcher's home provided a suitable context for the research.

In sum, this project was designed to allow for a collaborative experience by junior school teachers as they considered the efficacy of using the IEP as an assistive tool towards the differentiating of reading programmes for young, gifted and talented readers. The sharing of experiences, values, beliefs, goals and concerns was vital if this research was to result in the distinctive kind of generative action characteristic of action research:

Human beings learn who they are from their actions in the human world ... action is always carried out in the company of others conceived as free and equal individuals who possess the exercising agency ... In action the agent takes into account the unique points of view that others hold toward the situation in question ... the agent reveals his or her own distinctive view of the situation, but has developed it in communication with others and accommodates ... their own distinctive outlooks ... (Elliot, 2003, cited in Holly, Arhar & Kasten, 2005, p. 5)

Chapter Four

Results and Discussion

Introduction

The ‘action’ in action research implies response. That response is often immediate and practical, and pertains directly to insights gained from data collected about real issues explored. For this very reason, this chapter has been organised to expose the characteristic action aspect of this research. The ‘results’ chapter followed by the ‘discussion’ chapter commonly observed in many theses does not apply in this script. Instead, the results will be discussed in three phases, each phase highlighting the major issues which arose during that phase and the resulting actions. The subsequent discussion which follows each phase seeks to interpret and explore the significant themes and messages. This would appear a reasonable, less fragmented approach towards enabling the reader to capture the immediacy of feelings and responses characteristic of this action research project; in essence, to experience the unfolding story, our journey, together.

The three phases signify three distinct junctures; stages of ‘change’ the participants and I underwent throughout the project. These stages have been entitled *stepping out*, *striding out*, and *standing out*. Although they imply a journey of growth, they are not intended to implicate ‘having arrived’ for as will be discussed, in many respects, this is a journey without end.

Results Phase One: Stepping out

Fitting in

River Crest School is an urban, decile five, contributing primary school, with a roll of 455 students, and a teaching staff of 20. I met with the principal, Andy, late in June, 2007 to outline the project and seek permission to undertake the research at the school. Andy was quick to express a real interest in the project, explaining it would “fit in well” with his vision for the school. As both Andy and the deputy principal Gail had been recently appointed to River Crest, Andy explained this was a time of

great change for the staff. He described his leadership approach as “collaborative”, and to this end had initiated a professional development model known as PLOT (Professional Learning Online Tool), which promotes professional development communities. PLOT, Andy explained, is a “padlocks off” approach to professional development. Based on this model, Andy had abandoned all out-sourced staff development, and professional development was occurring from within the staff themselves. He spoke of “extreme mentors” for each of “four staff learning circles” each mentor a member of staff. These four circles focused on different curriculum areas, such as literacy and mathematics, and resulted in four “expert groups” operating within the staff.

Andy envisioned this action research project would partner well with the PLOT model for two reasons. In the first instance, it would serve as a practical, ‘hands-on’ opportunity for the teachers to delve into their own classroom practices, in effect, epitomising the PLOT principles:

Schools can no longer afford the luxury of separating professional development activities from the on-going realities of teachers' work and their workplace. The two must be seen as integrated and interdependent to support teacher and school change and ongoing improvement efforts. (Johnson, 1999 cited in PLOT, 2007)

Andy termed this research a “mini inquiry” for the teachers involved. River Crest is currently developing an inquiry approach to teaching and learning, and defines inquiry learning as “an integrated approach to learning where authentic and meaningful contexts present opportunities for everyone of our students to be actively engaged, challenged and successful in sharing and/or taking action following their learning.” Andy thought that this research project would provide teachers with an opportunity to employ the inquiry process firsthand within arguably the most authentic, meaningful context, their classrooms.

The second reason Andy believed the research would marry well with the school's PLOT approach was that, although River Crest had not undertaken any gifted and talented professional development, he saw the research serving as an "appetiser" for the teachers involved, who could possibly become "extreme mentors" in the school's gifted and talented professional development to be undertaken the following year.

Andy explained he would like to approach some teachers with the information letter (Appendix C), and as it was nearly the end of the term, the teachers could then think about their involvement over the holidays. He invited me to a brief, informal meeting with some of the participants the following day during recess, and ended our meeting by encouraging me to "think of this as your school - come and go as you please."

Getting to know you: The team

Jamie

Jamie, in her fifth year of teaching had been at River Crest since the beginning of the year, and was teaching a Year Two class. She appeared eager at the prospect of participating in the research, and later explained to me that was because she felt "ready for a whole change this year - something new." At her previous school, where she had been for four and a half years, she felt "something was missing" describing it as "behind the times." Jamie was excited by the River Crest's inquiry learning approach, and felt "honoured" that Andy had asked her to participate in the research.

Although we had yet to discuss the nature of the research in any real depth (certainly, we had not discussed the characteristics of gifted and talented readers) Jamie appeared to readily identify Zara, who at six years 10 months was reading between an eight to nine year old level, as an excellent candidate for the research. When I later asked Jamie how it was that she had been so quick to nominate Zara, she explained:

...probably because her mum had been in, and she said she wanted extra work for Zara and I didn't really know what extra work to do for them because the whole group were good readers anyway, but she had that 'little bit extra' and I was trying to come up with ideas and things to actually use for her.

Yet Jamie's reflective journal conveys a far more tentative approach to the identification of Zara as a gifted and talented reader, as she writes, "I have chosen one child in my class who I think may benefit from an IEP but I am not sure whether she is gifted and talented. What does this mean?" That Zara's mother may well have been the catalyst in Jamie nominating Zara for the research appeared a very real possibility.

I left Jamie with the *Let's talk about: Personalising learning* (Ministry of Education, 2006) booklet, and said we would meet as a group after the holidays at which time we would discuss the project more fully.

Vicky

Vicky had been teaching five years and was about to begin a new entrant class at River Crest. She initially expressed keenness at being part of the project, but later revealed she was hesitant as to the nature of her role, given she would have so few children in her class at the commencement of the research. At a subsequent meeting I expressed how her involvement in this project may present an ideal opportunity to identify a gifted reader upon school entry, and liaise with parents to develop a successive individualised programme, but Vicky felt certain there were no impending gifted readers about to start school. She based this belief on interviews she had undertaken with prospective parents concerning their children. Vicky also explained how she individualised much of the new entrant programme, for example, in spelling, as a matter of course. Although Vicky attended our introductory meeting, it was evident she continued to doubt her place in the research, and I respectfully accepted her withdrawal from the project.

Deanne

Deanne, in her second year of teaching, was at River Crest in a long term relieving capacity, teaching a Year Two and Three composite class. She conveyed real eagerness at being involved in the project, recording in her reflective journal:

... this will help me in my teaching practice to extend those who are capable and can easily be overlooked because they work independently. Students who have special learning needs who are not achieving at the level of their peers often get teacher aide assistance and the teacher's assistance on a regular basis, but those who work independently and produce work to a high standard get no more than praise, extra work, an extension activity or free time. I feel that these students should be able to develop at the rate they are capable of.

Like Jamie, she was quick to identify a gifted reader in her class, but wondered if there could be two, and expressed a "dilemma" in choosing. Toby, at seven years eight months had a reading age of 10 to 10.5 years. Deanne described him as:

a creative, critical thinker, keen reader, very focused when he is doing a project he enjoys ... self centred, throws tantrums when things don't go his way, easily upset, doesn't like change (inflexible), low self esteem, easily upset by others, and needs a lot of motivation to write.

Deanne was particularly concerned that after two terms of very "challenging behaviour", he was now reasonably behaved, and being involved in the research project may unsettle him again.

The other possible candidate, Jason, who was an equally capable reader, she described as:

responsible, mature, manages himself well, works independently, stable ... can think critically but not outstandingly ... he may settle for being content with what he already does well rather than being taken out of his comfort zone where his skills and thinking is challenged.

I encouraged her to think about this over the holidays and said that at our first focus group meeting we would discuss the characteristics of gifted readers.

Helen

Helen, an experienced teacher of more than 20 years, had been at River Crest for eight years and was currently teaching a Year Two class. My first contact with Helen was a fleeting statement concerning the research as she was exiting the staffroom, “just tell me what to do, and I’ll do it”. She quickly qualified this by saying how busy she was in the classroom and the school, later expressing real apprehension over the amount of work she envisioned the research involving. Helen questioned whether this would mean yet another programme to implement, and what exactly was it she had to do? I reassured her that the nature of the research was not about me telling her what to do and that we would work it out together, learn together. Yet as a classroom teacher, I understood exactly the constraints of time, extra workload, and the pressures of committing to the unknown that concerned Helen. I decided then that even before our first focus group meeting we would need to meet to discuss the collaborative nature of this action research and the importance of us communicating our values, beliefs and aspirations as well as our concerns if we were to honestly and openly “work together to develop the tools of our trade and join the larger conversation” (Holly, Arhar & Kasten, 2005, p. 9), that of creating new possibilities for action.

What’s it all about? The introductory meeting

The first week of the new term we met to discuss the exact purpose and nature of the project. As a learner, I very much need to see ‘the big picture’, and I presumed this to be true for the participants. I took the initiative of developing a concept map (Appendix H), a kind of ‘research roadmap’ which I was able to share with the teachers and encourage them to refer to as a chart, noting that the action research journey could well be one of deviations and diversions, depending on our course of action. I also hoped to ease any fears and concerns the participants may be experiencing, such as those expressed by Helen, for as I was to learn later, Jamie too was disturbed over the time commitment involved in extra meetings, not knowing what gifted and talented meant and the possibility of having to “work Zara by herself”, creating yet another reading group.

I found it difficult to gauge the effectiveness of this meeting, wondering if I had overloaded the team with information, and especially that the ‘roadmap’ may have appeared overwhelming. At a later date, Helen alleviated my concerns stating:

... you explained it very well - you put us all at ease. It wasn't like it was going to be something scary ... you explained that to us. You said this is learning for all of us so that actually helped because we knew we were all going along the path, together ... I went away from the meeting feeling quite happy.

I took time during this meeting to outline the nature of the reflective journal I had asked each teacher to keep. Having never kept a reflective journal of my own, I decided this was an opportune time to begin, and I shared with the team an outline I had developed, explaining what I perceived to be the value of keeping a journal. The teachers were asked to think of the journal as a record of their thoughts, feelings, opinions, judgements, questions, concerns, worries and ‘aha’ moments. I envisaged the journals serving as catalysts for discussion points, ways of tracking what was working and what was not working, vents for our frustrations, and records of our celebrations. Excited by the prospect of keeping my own journal, I assumed the teachers would embrace the idea. However, keeping a reflective journal proved problematic for both Helen and Jamie.

Helen later identified the journal keeping as one of the project's biggest challenges, explaining, “I probably didn't feel the need for it, because I've got my planning and that's what I refer to.” When questioned regarding her professional reflections she enlightened me:

It's in my head. It's ongoing all the time, reflecting, looking at what's going on, what worked and what you would do differently. I haven't got time to stop and write it down all the time.

Jamie too identified journal keeping as a particular challenge of the project, stating, “It’s just not me - it’s just not me at all.” Like Helen, reflecting was occurring “in my own mind.”

Yet Deanne, although she too found it difficult to make regular entries in her journal, embraced the journal keeping philosophy:

... you have such a range of thinking, don’t you? Everyday you have so many thoughts as to what went well. It’s not about what you’re teaching them and assessment, it’s more about evaluating you as a teacher ...

In later discussions, Deanne and I imaged the journal to be a kind of ‘treasure chest’, a box for the safe-keeping of our thoughts, which could be stored securely and retrieved at will. We decided it was important to be able to ‘stockpile’ our thinking, for in so doing, we freed our minds to deal with issues of immediacy, in both our personal and professional lives, but the journal meant our thoughts were kept ‘on record’. Deanne concluded keeping a reflective journal would become a standard occurrence in her next teaching job.

At the conclusion of the introductory meeting we set a date for our first focus group meeting. At this time the teachers would share the children they had in mind for the project, and identify the characteristics which led them to classify them as gifted readers. After this meeting I would conduct the first in-class observations, which would form the basis of our discussions for the second focus group meeting.

I left the meeting feeling somewhat unsure as to how the teachers ‘saw me’, and to a degree, how I ‘saw myself’. I wondered if in some way my presence was threatening, and if it was possible I would ‘fit in’, as my personal recordings reflect:

I kept stressing the fact that we would be learning together, that foremost I am a classroom teacher, but teachers could be researchers, too! Sometimes I feel

I don't fit in. The minute they know you are from the university, they think you are something else other than a teacher.

First focus group meeting

The following week we held the first focus group meeting. Four themes dominated this session:

1. The characteristics of gifted readers (which evolved into a discussion about the generic aspects giftedness and creativity).
2. Personalising learning (and its emphasis on inter-personalising learning).
3. The principles and practices of the IEP, and how these could apply to our gifted readers.
4. Inquiry learning (and its connections to personalising learning).

1. Characteristics of gifted readers - how do I decide who to choose?

The meeting began with the teachers sharing their choice of student participants, and qualifying what precisely led them to judge these students as gifted readers. Helen described her student Chris, who at six years 10 months was reading above an eight year level, as a “fast worker, who absorbs new concepts quickly, is very focussed, loves reading and is a computer whiz.” She did not believe he was “outstandingly creative”, but found he certainly was a problem solver, and the class computer expert, who was regularly called upon to solve all their problems. Helen's immediate concern was that “he could be ... given something with more focus to take him on and extend him further”. As Chris was such a fast finisher of all his work, and would gladly spend all his free time on the computer, we wondered if was pertinent to include his love of computers into his IEP. Helen believed this could be “the answer to all his dreams”.

Jamie commented again how when Andy had mentioned the research project to her before the holidays, her student Zara “instantly sprang to mind”. Although Zara was an excellent reader, Jamie had recently observed that she was “levelling off” and the other children in her reading group appeared to be “catching up”. This had been

confirmed by a PROBE (Prose Reading Observation, Behaviour, Evaluation) reading assessment.

PROBE is described as an informal reading inventory emphasising comprehension, which claims to provide focused, in-depth information about “a student’s ability to read and understand” (Te Kete Ipurangi (TKI) n.d., n.p.), and was used by all the teachers in the study as an individual reading assessment tool. Open-ended questions tap six types of comprehension: literal, inferential, vocabulary, evaluation, reorganisation and reaction, thus allowing the teacher to gain a “more accurate assessment of comprehension strengths and weaknesses” (TKI, n.d., n.p.).

Jamie explained that Zara was having difficulty with “inferencing, evaluating and re-organising what she had read.” Although at least four other children in Zara’s reading group matched her PROBE score, Jamie chose Zara because she “loved setting her own goals, and could confidently speak about them”. She also “loved doing projects” something Zara’s mum had spoken to Jamie about. Again, Jamie mentioned Zara’s mother coming to class enquiring what she could ‘be doing’ for Zara, and expressing Zara’s boredom with reading - a regular occurrence particularly earlier in the year. I questioned whether Zara’s ‘levelling off’ could in fact correlate to her ‘boredom’, and Jamie thought this a possibility.

For Deanne, PROBE had proved invaluable in assessing Toby’s reading ability, as she recorded in her journal:

At the beginning of the year I had him in a reading group that was not challenging enough for him. The PM [Price Milburn] testing did not reveal that he was capable of better analysis of the text. After doing PROBE with him I moved him to a more appropriate [higher] level of reading.

Deanne had remained indecisive about her choice of participant. She shared her ‘pros and cons’ list concerning both Jason and Toby. Although so much of Toby’s behaviour troubled her, she explained that when Toby became interested in a task, he

became so focussed that “he actually loses himself in it.” Fascinated by this description, I immediately mentioned Csikszentmihalyi’s notion of ‘flow’ and how it relates to the creatively gifted (a point we were able to pick up at a later date during our discussions with the gifted and talented advisor, Bev). Although Deanne was very concerned that the IEP would “spotlight” Toby and thereby unsettle him again, she also thought “it could be the best thing for him, as it could be the thing that continues to settle him”. She decided that she would work with Toby, remarking, “he is way out there with his thinking”, and “maybe what I learn to do with Toby, I can apply to Jason later on.” Finally, the team wondered that if Toby was setting his own learning goals, would he be more settled and responsive once the focus was taken off his challenging behaviour?

At this time I gave each teacher a copy of the article *Meeting the educational needs of young, gifted readers* (Moore, 2005), which was to prove beneficial in confirming Deanne’s decision to have Toby participate in the project, as she later recorded:

As I have read the article ... I have been able to see Toby clearly in the description they give for gifted readers. He has three aspects of giftedness (above average ability, task commitment and creativity) and he has all the negative characteristics. He doesn’t like change.

Our ensuing discussion touched on the generic characteristics of giftedness, particularly creativity. I was fascinated at the level of knowledge these teachers seemed to possess concerning the characteristics of giftedness, particularly as they had had no professional development to this end, and I remarked to them how “spot on” they appeared in their identification of gifted readers, and the creatively gifted, judging by the literature on these topics. This discussion proved, for Jamie, worthwhile, and affirmed her choice of child participant:

It was great today to be able to discuss the different students we have chosen. This gave me a better understanding of what GAT students may be or what

they exhibit in their behaviour. I believe Zara is the best candidate in my class for this project.

2. Personalising learning - or should that be 'inter-personalising' learning?

At the time of our introductory meeting, I had given each teacher a copy of *Let's talk about: Personalising Learning* (Ministry of Education, 2006), and encouraged them to read this as we would discuss the contents at our first focus group meeting. To this point, the team were unfamiliar with the personalising learning concept, and it quickly became apparent I would have to explain the personalising philosophy based largely on the English literature I had reviewed, for relying on the booklet alone only served to highlight the disparity between its title, and the intended philosophy. I pointed out that personalising learning is not individualising learning, rather its constructivist and social constructivist underpinnings call on the teacher, the student group and the individual student to produce together, meanings and understandings that the individual achieves. It is a social, not individualised practice (Campbell, et al., 2007). Why then, Helen questioned, with its inter-personal emphasis, was it being explored alongside an Individualised Education Plan, which clearly emphasised individual goals and activities? This provided a much needed catalyst to explore, exactly, the nature of the IEP and its place in personalising learning.

3. The IEP - where does it fit in?

Apart from Jamie, who had taught a student with Down Syndrome in her previous school and had seen a copy of an IEP, the teachers were unfamiliar with the principles and practices associated with this tool. I had taken to our meeting samples of IEPs colleagues had constructed in the past, along with a power point presentation outlining the components of the IEP and when and how it could be used. We spent time exploring, in particular, the processes associated with the IEP and I stressed that although it was indeed a plan for an individual, the strategies and activities which would be implemented as a result may well apply to other children in their classes. I noted that as we were looking to use the IEP tool as a pathway towards personalising learning, with its inter-personal emphasis, then most certainly other children could be

involved in the activities. Whether or not this was made clear, is doubtful, for an entry in Jamie's reflective journal later that day reads:

... an IEP will benefit Zara, however, I do wonder whether this means having another reading group. Does this IEP mean she works alone or has one or two others or can it be worked in with the whole group. With eight in the group would an IEP be beneficial for one child or should it be a GEP (Group Education Plan)?

4. Inquiry learning - is there a connection with personalising learning?

During our meeting, I noted that in Jamie's room she had featured a wall display of De Bono's thinking hats. I asked if she used these in her programme and she replied, "No, not the way that other school did." What followed was a passionate and lengthy discussion concerning an 'inquiry learning' school which River Crest had visited as part of their professional development.

River Crest's professional development had been centred on inquiry learning for two years now. Helen had described last year's professional development as "a lot of pedagogy" hard to get her "head around." However this year, particularly after the visit to the other school, inquiry learning was being brought into focus. Helen enthusiastically remarked: "This is a school you would like to see, Laurie, this is personalising learning in action." The team went on to describe their experiences in this school where all children had their own pathways of learning, opting in to what they wanted to do, void of timetable restrictions, and from a very young age, seemed to be able to make responsible choices, setting and evaluating their own goals. The school sounded remarkably like the English schools Leadbeater (2005) had written about, and I was able to share Leadbeater's (2005) description of personalising learning schools in operation, in England.

That the team had made a connection between 'inquiry learning', with its emphasis on students constructing their own learning pathways, and personalising learning, with its emphasis on children participating in their own learning by programme

design, assessment, goal setting and evaluation was an unexpected outcome for me. When asked later to define personalising learning, each teacher chose to articulate their understanding in terms of its relationship to inquiry learning:

I suppose to me it fitted in with the inquiry learning where it's making it more personal ... it's like you're all going in the same direction but each child has their own direction that they want to go in within that. (Jamie)

It's very similar to inquiry learning actually. In fact, that's probably why it [the project] turned out so good, because it's been tied in with what we are learning in our professional development and getting the children identifying what they're interested in and them asking the questions and going from there - making it relevant. (Helen)

... it fits with the inquiry model, that children are learning things that are relevant to them ... they actually have some choice in their learning. (Deanne)

Previously unaware of the precise nature of inquiry learning, I too was beginning to see how inquiry learning and personalising learning could in fact dovetail. I was predominantly concerned with how this would translate for children, as a recording in my personal journal reveals:

I just finally figured out what personalising learning means. It's about writing your own script, building your own set, and surrounding yourself with the kind of actors you want to take the roles you need. It's about being the *producer* of your own show. Now, let's translate this for kids; it must be about:

- Saying the things that are important to you by writing your own 'learning story'.

- Surrounding yourself with the things you need to write your story - books, teachers, adults, friends, computers, crayons, etc., whatever you need to make it happen.
- It's about assigning roles to people so they will help you turn your story into a production.
- It's about re-writing your story or at least writing another act, so your story keeps growing into a major, full length production.
- And, it's also about starring in other peoples' shows, because just as you need their acting skills, they need yours.

Strategies to share

Throughout the meeting we continued to discuss differentiated strategies and to share ideas for 'our' gifted readers. I was rapidly becoming aware of my need to access literature in order to assist the team in building a repertoire of 'do-able' approaches, for our conversation was leading me to discern that little, if any, qualitatively differentiated instruction was taking place for these gifted readers. I remained acutely aware of the teachers' workloads, the strain our extra meetings would inevitably place on them, and to a degree, the interruption that this project represented in their professional lives. I would be seeking out realistic, relatively easily implemented strategies, which would provide challenge and choice for the gifted readers. I asked the team if a meeting with the Gifted and Talented Education Advisor, Bev, sometime in the coming weeks, would be helpful, and they eagerly agreed.

We concluded the meeting by setting dates for me to observe in the classrooms. It was decided a 'preliminary' visit may be helpful so the children could familiarise themselves with my presence in their rooms. The first 'official' classroom observations would be held soon after this.

Classroom observations

The following week I spent a morning visiting the classrooms, familiarising myself with the students and obtaining a 'feel' for the culture in each class. The rooms themselves reflected much of what seems to embody New Zealand junior school

classrooms; colourful, print-immersed and displaying current topics of interest. The reading programmes, too, characterised our junior school approach to the teaching of reading; the well established 'shared reading' (on the 'mat') followed by the students being organised into similar ability groups for reading instruction and follow up reading activities. The teachers appeared well planned (certainly, they followed a planning format for their instructional groups) and their interactions with the children were warm and responsive. In most instances, the children seemed interested and focussed on the task at hand.

The shared reading session in Jamie's room, which involved the whole class, comprised of the children reading a poem together, and Jamie questioning them on the poem's content. The majority of the questioning was literal, involving both interpreting the picture and locating the answers in the text. There was some questioning of the children regarding their own personal experiences, but this was minor. The children were then dismissed to their various reading activities, but Zara's group remained on the mat for their instruction.

Jamie reminded the children that their learning goal was to understand what they were reading. I was familiar with the text selected for Zara's group, and recognised it as one appropriate for exploring themes of loneliness, isolation, and the case for keeping pets for companionship. The text is graded at a 10 year reading age. Jamie began the session exploring the title and its possible meaning, and the children were then told to read a page silently, as Jamie asked a question related to that page. Again, the questions were mainly of the 'low level' type, with the children being asked to tell, locate, find, predict, and describe.

In an effort to extend the children's thinking, I questioned them as to whether it is possible to be surrounded by people, yet remain lonely? This ignited a zealous discussion over playground behaviour, and how indeed, even in a playground full of children you can feel very lonely if your friend leaves you. After reading a few more pages, the group was dismissed and told to read the rest for themselves, and then go on to their printing activity. I watched as Zara and two friends fidgeted and giggled

at their table, and I decided to sit with them and devise an activity which would hopefully challenge their thinking, based on the text.

I introduced the terms ‘pros’ and ‘cons’ and asked them to create a list regarding the pros and cons of keeping lots of cats. They responded with suggestions such as: keeping lots of cats is a great idea because you could sell them and raise money to sponsor children overseas, or send the money to Greenpeace and save the planet. Responses such as these, from six year olds, and the discussion we had just had concerning the nature of loneliness, only served to confirm my belief that for these children, the possibilities for in-depth, higher-order explorations in thinking were boundless, but this hinged on skilfully articulated questioning on behalf of the teacher.

On my second visit to Jamie’s room, Zara’s follow-up reading activity consisted of completing a worksheet based on the narrative structure of the story they had just read, identifying the main characters, setting, plot, problems, complications, and resolutions. Zara worked happily and quickly on this activity. When she had finished she was told to go onto a phonics-type worksheet that the rest of the class was completing adding ‘ld’ to the end of words. This did not appear particularly challenging to Zara, given she was reading a 10 year level text.

The reading session in Helen’s room was similarly formatted to the one in Jamie’s class, with the familiar shared poem reading session. The teacher was exploring the ‘sl’ blend sound, and the poem was about a slug. For the most part Chris appeared engaged, particularly when asked “how can something move without legs”, and he offered to find some slugs for the class from his hedge at home. During his instructional reading time, I noted he appeared to make abstract connections between the story which took place in the islands, and facts he knew regarding the Amazon River.

On my second visit to Helen’s room, a relief teacher was in the class, as Helen was absent. Chris had just been reprimanded for throwing a crayon (he was meant to be

reading from his 'fluency' box). He appeared angry, and I approached his table where four other children were reading a play together. The books in his box were several levels below Chris's instructional level, and he was not interested in exploring them. The class were then brought to the mat, and Chris was then asked to assume the narrator's role in the class play (a part he was nearly not awarded due to his behaviour, according to the teacher). He was very pleased, and undertook the activity willingly (Chris loves plays, and acting). Following this, the teacher issued a worksheet activity to which he responded "oh that's easy." He completed it quickly, and was then told by the teacher to assist those who were 'having trouble'. This charge did not seem to please him at all, and he responded by saying he did not want to, but he reluctantly sat with a boy who was experiencing difficulty. After 10 minutes he walked away.

During my visits to Deanne's room, she was exploring graphic organisers such as PMIs as a way of extending the children's thinking during their instructional reading sessions. On this occasion she had created a segmented wheel from paper, and each member of Toby's reading group was to summarise the main points of a particular chapter, recording them on a segment. Collectively, the segments would form the whole story. It was evident that Toby was not keen on the prospect of writing his ideas down, but set to work on the task. The remainder of the class were noisy, and appeared unfocused on their various activities, which promoted a discussion between Deanne and myself about why we teach reading the way we do, and how we could do it better.

As a second year teacher, it appeared Deanne was coming to terms with the many and varied aspects of her profession, including management techniques, exploring teaching strategies, and discovering her teacher 'self'. Often my visits to her class would 'morph' into on-the-spot discussions concerning teaching theories and the nature of our roles as teachers. I believed these discussions were important to both of us, for although at times my role was that of mentor, at others, we were professional equals, probing for answers to weighty issues. I was becoming aware that an action researcher can wear many different hats.

The classroom visits had proved invaluable. They had served to confirm three critical points:

1. The students selected were indeed gifted readers, integrating prior knowledge and experience with text information and were capable of applying higher order thinking skills, such as analysis and synthesis (Catron & Wingenbach, 2001).
2. The need for each teacher to integrate higher order thinking skills into their reading programmes was critical, if all students were to interact with the texts to extend critical thinking. The most obvious method for achieving this, in the first instance, was through higher order thinking questioning.
3. Little (if any) differentiation of the reading programme was occurring for the gifted readers. I would need to assist the teachers in incorporating a range of strategies into their reading programmes if they were to become qualitatively as well as quantitatively different.

Conclusion to results Phase One: Stepping out

Tentative and often challenging, ‘stepping out’ can entail ‘reaching out’ to establish, and ultimately strengthen, connections. This stepping out phase was characterised largely by shared trust; I had shared my research construct with Andy, who in turned shared his school’s vision with me, and trusted that the project would be worthwhile and beneficial for the teachers and students. I had shared my ideas, hopes and professional knowledge with three teachers, who in turn had shared their concerns, understandings, and wisdom; entrusting their students, and in many respects, their professional ‘selves’ to me. Our journey had begun, and in many ways, the ‘hardest’ part was over: “The distance is nothing - it is only the first step that costs” (du Deffand, n.d; n.p.).

Discussion Phase One: Stepping out

The case for action research as professional development ‘mini inquiries’

Andy’s approach to professional development with its professional learning communities was entirely new to me. I had experienced professional development sessions largely as impersonal, fragmented, distant, and of having no real lasting effect, reaching similar conclusions as those recorded by Strang (2001) in her small scale qualitative research study involving teacher change and professional development:

Short term professional development courses providing one-off or infrequent interactions or feedbacks from the facilitators are likely to have little or no long term impact on changes to the classroom programme. (p. 247)

Johnson (2005, cited in Mertler, 2006) describes traditional teacher inservices as gatherings of teachers, who, after a long day of teaching or a jam-packed workshop, sit and listen to an expert wax lyrical about a new methodology, approach or instructional material that they do not believe bears any great significance to their classrooms or teaching styles. Action research, on the other hand, affirms the professionalism of teaching by giving teachers a say in their professional development (Schmuck, 1997, cited in Mertler, 2006). Simply put, action research affords teachers the opportunity to connect theory with practice, by inquiring about real issues, under real conditions. How better to achieve this than by participating in a mini inquiry?

Andy’s description of this action research project as a ‘mini inquiry’ at River Crest was completely appropriate. In a River Crest document detailing the steps involved in the inquiry approach, the links between action research and inquiry learning are evident. Inquiry steps at River Crest involve:

- *Getting hooked*: Tuning into the scenario, sharing prior knowledge and posing questions.

- *Knowledge bomb*: Becoming experts through planning, gathering, sorting and sharing relevant information, developing further questions and hypothesising.
- *Discovering*: Sorting information, discovering patterns and exploring the idea of needing to know more.
- *Exploring*: Setting own learning paths for deeper understanding.
- *Reflecting*: How has our own thinking changed? How effective has our own learning been? How has each one of us contributed to the collective knowledge of the group?
- *Taking action*: This could involve sharing reflections, applying ideas and/or taking personal or group action.

The idea of this action research being a ‘mini inquiry’ for the teachers held considerable appeal, as a personal recording reflects:

... the more he spoke, the more I saw this as a positive - sometimes I think professional development can ruin a teacher’s spirit! At least this way, the professional development for G and T will be ‘on-the-job’ so to speak.

Given that this project partnered so well with their own professional development, and in light of the fact that Jamie herself had expressed she was “ready for something new”, it held the potential to create meaningful and enduring understandings. Yet how meaningful was it to ask these teachers to embrace a project of my conception, of which they initially had no understanding concerning practices they had no experience of? I reasoned what made this approach different from standard professional development models was that *we* would be working intimately, *we* would get to know each other, on a personal/professional level, and *we* would make changes, together. This did not mean however, that I could not take the initiative and make informed decisions based on my own professional judgements, but the soul of this project would be collaborative, ‘on-the-job’, daily, professional development, not twice a term, distant learning, conducted by a detached provider. In essence, we would be personalising our learning, together.

Personalising Learning: The new ‘pedagogical speak’

The teachers had been quick to make connections and translate elements of the inquiry learning approach to personalising learning. I too sought to understand the construct by creating the ‘producer’ analogy. Arguably, we seek to find relationships in previously unrelated ideas in an effort to better understand or solve a problem, a central element of the creative process, according to Fraser (2004). In so doing, the teachers found familiarity in the personalising learning construct. But personalising learning is new. Certainly, Leadbeater’s (2005) vision of personal tutors, learning technicians, shared schools across communities and a seamless education is not routine. However, this idea is far from evident judging by the New Zealand publication on the construct.

It is worthy of consideration that the publication of such dispassionate, routine statements as *Let’s talk about: Personalising learning* (Ministry of Education, 2006) serve to affirm teachers beliefs that a construct such as personalising learning is in fact, ‘nothing new’, and simply an expression of commonly held ideals about the nature of teaching and learning familiar to many educators. This, coupled with its ambiguous title (which arguably reads as ‘individualising’ learning) led the teachers in the project to decide “it’s what we do anyway.”

In her analysis of the personalising learning, Diana Burton (2007) cautions that as educators, “We need to be interested in the way in which these ideas are researched and justified and not just in their utilitarian application” (p. 3). Many teachers are keen to initially accept new concepts at face value rather than question their theoretical or empirical validity, resulting in the over simplistic, mechanistic application of such ideas (Bartlett and Burton, 2006, cited in Burton, 2007). The task, therefore, is for educators to decipher such constructs, before related phrases (such as ‘personalising’) become accepted into the educational lexicon, and the legitimacy of the construct is taken for granted, without anyone sharing an understanding of what it means, much less knowledge of its research basis (Burton, 2007). It took detailed research into the English conception of personalising learning

to be able to share with the teachers its distinctive 'inter-personal' features and how these would relate to gifted readers and their individualised education programmes.

Identification of gifted readers

The teachers appeared to access three main sources in their identification of their gifted readers:

1. Their own professional judgements.
2. Parent advocates.
3. Reading assessment tools such as PROBE.

1. Professional judgements

I wondered why the anticipated 'heated' discussions over the nature of giftedness and talent, which had so characterised my own gifted and talented professional development, had not occurred in our interactions. I had fully anticipated this, as my personal journal reflects:

I can see the usual issues over definitions, etc., but I don't intend to split hairs over this, and rather than exhaust everyone with definitions, I'll settle for a quick overview, and get the staff to identify the 'able' readers in the group.

Could it be that in narrowing down the field to gifted readers, we had in effect *contained* the definition, thereby eliminating the generic, global descriptors which often seem too big to encapsulate? Apart from the Moore (2005) article, we spent very little time determining who was a gifted reader (although Deanne expressed difficulty in selecting between two, both of whom exhibited gifted behaviours). The teachers seemed to 'know' almost intuitively; certainly Jamie expressed this as a "kind of inclination or something".

One salient theme emerging repeatedly in the literature on the characteristics of gifted children is that they are patently different from other students. Although social, emotional, cultural and physical abilities vary amongst individuals, collectively, they

are often 'out of step' with their age peers, and perhaps even in conflict with the regular curriculum and its instructional delivery (Riley, 2004b; Winner, 1996). 'Out of step' may have been the 'inclination' Jamie made reference to, for certainly all three students exhibited reading behaviours uncharacteristic of their peers: Chris "absorbed new concepts quickly", Zara was "bored" and ready for challenge, and Toby was "way out their with his thinking", examples of the affective and cognitive behaviours identified by Vosslamber (2002) as indicative of gifted readers. All the students were reading approximately two or more years above their chronological age (Dooley, 1993).

In New Zealand, the prime responsibility for educating gifted and talented students rests with the classroom teacher (Bourne & Sturgess, 2006), with 82 percent of schools providing for their gifted students in this manner (Riley et al., 2004). This is where most gifted students, whether identified or not, will spend the majority of their time at school. That the classroom teacher relies heavily on their own professional judgements as a factor in identification is a truism, as highlighted by an entry in Deanne's reflective journal:

Toby consistently thinks outside the square at discussion times. Today a student shared her story about a bear that she had been given at birth. When I asked the class how old the bear was they had to think carefully. One student worked out the age as being the same as the student, but Toby disputed this saying it was older. He explained that the bear had to be made in the factory first. No one else had thought of this.

Again, at a later date:

Toby continually shows he is capable of deeper thinking than the others in the group, and he has an ability to apply information learnt in other situations. When he is focussed on learning he does not display the negative characteristics he is capable of. He is focussed, enthusiastic, excited and willing to work. When he is not interested in a task he can be distracted,

argumentative, over-sensitive to others or silly; unwilling to apply himself to the task ...

In a similar way Gallagher's (2006) qualitative research into school transition for gifted five year olds found four out of five teachers recognised the unique abilities of the children in the study, despite any formal assessment or training in gifted education. With the majority of the children in the study, advanced language was identified as their area of strength at the time, a domain known as 'schoolhouse giftedness'. As such, it could be assumed the school would capably address the needs of these children, but this did not occur.

2. Parents as advocates

Gallagher (2006) found parental anxieties over their child's needs not being met intensified during their second year at school. It was at this time the children began 'acting out' at home the boredom and frustration they were experiencing at school, leading parents to become proactive in advocating for their child's needs.

This was now Zara's second year at school, and from early in the year her mother had been requesting "extra work" and regularly visiting the room to ask what she could be "doing for Zara". Zara's mother undoubtedly was a factor in Jamie so readily identifying Zara for the project. Jamie herself was unsure of what gifted and talented meant, but knew Zara had "that little bit extra" compared to the others in her group. However, she was "levelling off" and her mother had said she was bored. Jamie was eager for strategies to extend and challenge Zara, who was apparently underachieving:

... When their academic needs are ignored, talented students' reading is stunted and their opportunities to learn how to react to challenge are diminished. Talented readers are left to develop and succeed on their own, as they need instructional support and curricular challenge that is different from strategies used with struggling students. (Reis et al., 2004, p. 315)

3. *Reading assessment: PROBE*

All three teachers accessed the PROBE reading assessment as an identification tool in placing their students into their appropriate reading level groups. Certainly, in Deanne's case, PROBE had helped her ascertain Toby was capable of much greater in-depth text analysis than she was aware of. Yet vitally, PROBE did not assist any of the teachers in altering or adjusting their reading programmes to accommodate for the assessment information gained.

In a New Zealand review and evaluation of diagnostic tools in English (TKI, n.d.), a major shortcoming of the PROBE assessment is advanced:

No section of the *Guide* is devoted to follow-up activities, or advice and guidance on how to use results from *PROBE* to plan further teaching. There are general references, such as 'Ultimately, it is assumed that the hard data will be used as the basis for future group or individual reading programmes to extend and develop skills - particularly in comprehension' ... (n.p.)

Obtaining hard data is one thing, knowing what to do with it is quite another. If the teachers in this study were to confidently implement differentiated reading strategies and activities for their gifted readers as per the students' IEPs, they would first need to be able to establish learning goals and assessment criteria, and then access a repertoire of strategies and resources. This would prove a large focus of our next phase, 'striding out'.

Conclusion to discussion Phase One: Stepping out

Dubbed by Andy a 'mini inquiry' for the teachers involved, this action research project was proving to be both timely and appropriate. In the first instance, its principles aligned well with River Crest's current inquiry learning professional development. Secondly (and rather unexpectedly for me) the teachers had made connections between some fundamental principles underpinning both inquiry and personalising learning, that of giving the learner choice in creating their own learning pathways.

Yet much of what characterises personalising learning is new, and Burton (2007) cautions educators to be wary of accepting new concepts at face value rather than question their theoretical or empirical validity, resulting in the mechanistic, over simplistic application of new ideas (Bartlett & Burton, 2006, cited in Burton, 2007).

The vast proportion of New Zealand gifted students, whether identified or not, spend the majority of their time within the regular classroom. That the teachers displayed astute professional judgements concerning the identification of their gifted readers, is undeniable. Alongside their professional judgements they relied on assessment tools such as PROBE and the parents of the gifted children to gain their judicious insights. Yet they lacked the ‘tools’ and know how which would enable them to differentiate their reading programmes; a fact they were well aware of and eager to rectify.

Results Phase Two: Striding out

Change is imminent

As a result of my classroom visits, I had decided that fundamentally, we would need to address the issue of teacher questioning and higher order thinking skills. I had observed, for the most part, literal, lower order question types, requiring the children (including the gifted readers) to tell, locate, describe, name, predict and describe. I sought out and created a list of reading approaches, activities and strategies I considered to be worthwhile for the gifted readers, the basic premise being to encourage higher order thinking. Foremost on my list was the application of Bloom’s Taxonomy (revised) to guide teachers in their questioning, alongside a ‘three level question guide’. I had successfully used this guide to assist in reading comprehension with my own classes for many years, and found it useful in depicting the types of questions we ask, and where we can find the answers. The guide reads as follows:

1. **Literal questions:** The answers are right in the story. You will need to read carefully.
2. **Inferential Questions:** There are clues in the story. You will need to read and think carefully in order to figure it out.

3. **Evaluative Questions:** The answers are not in the story. You will need to think carefully and decide. Then you will need to explain why you think this.

As the children became increasingly familiar with the question types, they would take great delight in composing their own questions and quizzing their classmates. Fundamentally, however, the guide served as a useful teacher prompt, a kind of reminder to think about the types of questions I was asking. I made a large, laminated chart for each teacher, and attached a copy of Bloom's Taxonomy (revised) on the back of each chart, which I had colour coded to correspond with the three question types. I was hopeful that it would prove useful for the team, and at our impending meeting, I would offer to demonstrate its use during a reading session for each class.

Hidden treasures

Our second focus group meeting was set for the end of August. Just prior to the meeting I had visited Andy to request teacher release time for the IEP meetings and our final semi-structured interviews. I also wanted to bring Andy 'up to speed' regarding the project. It proved fortuitous that I mentioned the higher order thinking emphasis, for Andy informed me of a programme operating within the school, run by Gail, the deputy principal, which focussed solely on the development of higher order thinking skills. Andy explained the programme operated on the belief that children can be taught to think efficiently, and that a thinking student is a student with a bright future. Once a fortnight each class in the school spent a two hour session with Gail. The children were presented with values-based scenarios and learning experiences to explore, in the belief that they would develop and hone a set of skills to call on when faced with personal or group challenges, issues or inquiries. The inquiry model was systematically taught, alongside Costa and Kallick's *Habits of Mind*, and the students had been introduced to Gardner's *Multiple Intelligences*, in the hope they would be able to identify their 'personal smarts'. I was intrigued, and I could not understand why the teachers had not mentioned this to me. I decided to meet with Gail immediately to inquire further into her programme.

Gail shared a detailed planning overview, which described the emphasis for each session. She explained the programme operated during each teacher's classroom release time. Effectively, Gail worked with each class without the teachers present, but each teacher received the planning overview. I expressed how impressed I was with this initiative and how closely the whole higher order thinking focus paralleled with the ideas I would be sharing with the team. I was troubled, however, that the teachers were not able to see the programme in operation, and that the very skills and strategies I would be advocating for their use, were in effect, in use with their classes, but by a different teacher. I knew I would have to raise this issue with the team at our meeting the following week.

Second focus group meeting

The second focus group meeting proved a defining one for both the teachers and myself. After observing in the classrooms, I had developed a real sense of my role, and my worth, in this project. I was also becoming aware of the sheer size of what we were about to undertake, as evidenced by a personal reflection:

This whole research is based on the efficacy of the IEP in assisting teachers in differentiating reading programmes, so I guess that's where I come in; as the observer and researcher who lets the teachers know what I see, and offers suggestions based on research, and then assists teachers in setting goals for their students. Then, together with the parents and the children themselves, we attend these meetings, set goals collectively and put programmes in place, and then evaluate. Sounds easy, but it's big.

Our second focus group meeting was characterised by an extensive discussion concerning the impending IEP meetings (scheduled for the following week), the sharing of ideas, strategies and resources, and my inquiring into the higher order thinking programme in operation in the school, run by Gail.

Although I had never attended an IEP meeting where the student had been present (and to a degree I was uncertain what to expect), I reasoned that in the first instance,

we would need to put the child, and their parents, at ease. I stressed the importance of explaining to the children the purpose of the meeting: that they were such good readers we wanted to make sure they were enjoying their reading and learning as much as they possibly could. It was important that the parents would see this as an opportunity to share their expertise, and to express any concerns or desires for their child. I formatted an IEP planning template (Appendix I), based on one suggested by Cathcart (2005) and explained each of the components. I provided each teacher with a copy, encouraging them to think about their student's needs and their learning goals before our meetings the following week.

We then discussed my classroom observations, and I expressed what a wonderful experience it had been to observe in their classrooms. I had always believed visiting a colleague's classroom to be inherently powerful as a means of professional support, but one, in my experience, which rarely occurred. I shared my general observation of the need for articulate teacher questioning as a springboard for higher order thinking, and offered the team handouts on Bloom's Taxonomy (Teachers' Corner, n.d.), a reading by Wilson and Wing Jan (1993) *Guiding questions to guide questions*, blackline master templates of each Thinking Hat and when to use it (Kurwongbah, n.d.) and a printed copy of a power point *Catering for gifted readers* (Easter, 2007). We then went on to explore my list of activities, strategies, and ideas which pertained directly to those advanced in the literature I had reviewed as being appropriate for the gifted reader:

- Inquiry reading (Abilock, 2004; Cathcart, 2005; Catron & Wingenbach, 2001; Dooley, 1993; Moore, 2005; Vosslamber, 2002).
- Ability grouping and flexible grouping (Crammond, 2004; Moore, 2005; Reis, et al., 2001; Vosslamber, 2002;).
- Critical reading guidance (Reis et al., 2004).
- Higher level or higher order thinking skills (Abilock, 2004; Catron & Wingenbach, 2001; Hartley, 1996; Moore, 2005; Vosslamber, 2002; Winebrenner, 1992).

- Creative reading skills (Catron & Wingenbach, 2001; Hartley, 1996; Vosslamber, 2002).
- Guidance on choosing books (Halsted, 2002; Hartley, 1996; Reis et al. 2004; Vosslamber, 2002).

Apart from the use of Bloom's Taxonomy and my 'three level guide to questions' my list included:

- Graphic organisers such as Venn diagrams and PMIs.
- Book marking: the insertion of key questions into children's reading material as prompts towards encouraging them to engage with the text in deeper ways.
- Book marking with Thinking Hats: in the same manner, different hats are inserted into texts at strategic points. For example, the green hat indicates green hat thinking.
- Teacher reading chapter books to the class: an uncommon activity, in my experience, in the lower junior classes, but one I had experienced as encouraging visualisation techniques and higher order thinking (provided the questioning was higher order).
- The use of non-fiction texts as 'reading to' material: this has the potential to again, encourage deeper level thinking, and explore real life occurrences and issues.
- Author studies.
- Biographical studies.
- Independent research studies.
- Sustained silent reading, using material at a higher or more challenging level.
- Language experience.
- The library: specifically, someone to help children select and find appropriate reading material at their level.
- Literature circles: all children read the same text independently, and then discuss related issues.
- Book talking: a kind of verbal book review, with a set presentation criteria to encourage confidence in public speaking.

Arguably, any or all of these suggestions could be used in the class reading programme, but for the gifted readers, the programme would need to enrich and accelerate. I asked the teachers to think about the best use of their reading time: the shared reading activity which all the class participated in; the common use of worksheets; and the very easy reading material used in the gifted reader's fluency boxes, which was providing little challenge or interest for the children. There had been much discussion, and much for the teachers to think about, as Jamie recorded in her journal:

A great meeting today. I enjoyed the handouts, e.g. Blooms Taxonomy, Six Hats, etc. They have provided me with many great ideas not only to use with Zara but for my whole class reading programme. I realise that my reading programme needs to change ... I feel I need to get past using worksheets to keep them busy and provide my students with meaningful activities to get them thinking. I have many thoughts running through my head ... I am really keen to implement new ideas into my class.

Deanne too had been thinking about ways to differentiate her reading programme, noting the specific needs of her gifted readers:

I agree with Moore (2005) when she says that it is not enough to give gifted readers a text to read silently while I drill the others ... they can read the text independently but need help and motivation to think about what they have read in a different way. I am becoming more aware of the type of questions I am asking them and the type of activity I give them ... it needs to be something that extends their thinking about the text, and increases their skills at working with language, rather than just keeps them busy.

As the meeting drew to a close, I asked the team about the higher order thinking programme in operation in the school, run by Gail. They explained it had only been in operation that term, and that they really had little awareness of the programme, but Deanne said how her class had returned from a session "absolutely animated - talking

about what kind of ‘smart’ they are.” I shared how impressed I was regarding the programme’s content and Gail’s approach to the sessions, and how precisely it aligned with what I was advocating for their classroom use. Gail was, I explained, an invaluable resource, to which Deanne remarked, “We really need to use her”, and Helen asked if it was possible for her to model a lesson for us. The team were eager to observe a session with a reading focus, perhaps using a sophisticated picture book, and I agreed to approach Gail to see if this was possible early in the new term. It appeared to me pivotal connections were being made by the teachers, as a personal recording indicates:

It seems that the connection or bridge has been built between their inquiry learning professional development, the higher order thinking programme in operation, and my reading research, culminating in the teachers seeing the connections and now wanting to have them modelled. I think I am a ‘bridge builder’.

The IEP Meetings

The meetings took place just prior to the end of the third term. Each student attended their own meeting, along with their mothers and in Chris’s case, his parents. The teachers were well prepared, having carefully considered the learning needs of their students, and relayed these in a positive and supportive manner. Zara and Chris were both active participants at their meetings, but Toby appeared disinterested and found it difficult to express himself.

Toby’s IEP

Both Deanne and I were determined to make this IEP experience a positive one for Toby. This meeting was about ‘Toby the great reader’ and as such, that was our sole focus. But Toby was well used to his negative behaviour being the centre of focus; either his mother or father called daily after school to check on ‘his day’.

From early on in the meeting, Toby found it difficult to participate, preferring to draw on the white board or explore the meeting room we were in, yet were careful to

include him throughout, asking him how he felt about reading, what he enjoyed or did not like, and what he would like to do, although he did not appear particularly responsive.

Deanne shared with us Toby's strengths in reading; his advanced reading level, his creativity of thought and his ability to focus when he is really absorbed in a task. She explained that Toby found it challenging to articulate his thoughts at times, sometimes verbally but particularly during writing, so a visible output was not always evident of his creative thinking. Although she did not express it during the meeting, an insightful entry in her reflective diary reveals just how frustrating Deanne found Toby's behaviour at times:

Toby displays so many of the characteristics of a GATE student, but I find it frustrating that he can be his own worst enemy. His attitude to others, himself and his environment so often prevents him from entering consistently into a programme that has continuity. Much of the work that we begin in a week with enthusiasm is not completed, and then if it is carried into the next week it loses its momentum and becomes an uphill grind to get him to complete.

We all agreed Toby needed assistance in articulating his thoughts in a coherent manner, and perhaps some graphic organisers such as KWL charts (what I know; what I want to know; and what I learnt) may be helpful, alongside the Thinking Hats, Bloom's Taxonomy and activities such as the book marking idea. Certainly, Deanne was keen to take the onus off written work, for this seemed to cause Toby the most distress, and together we compiled a range of alternative ways of communicating his great thinking using digital presentations such as power point or photostory. Alternatively, Toby could access paintings, posters, models and drama such as puppet shows, all of which he seemed eager to make use of. We thought too he might enjoy being the class librarian, selecting a book to 'sell' to the class, and Toby and his mother thought it a great idea that he join the town library to select his own books.

In short, Toby would be given far more choice in how and what he produced. Our evaluation criterion was mainly that Toby would be able to articulate his thoughts on a text with minimal teacher prompting. Deanne was also keen to allow Toby more time when he was 'in flow' to finish his task, for being made to finish before he was ready caused him great anguish.

We encouraged Toby's mother to actively participate throughout the meeting, for as we explained, she was the 'expert' regarding Toby. Her insights proved invaluable. She described him as a perfectionist, explaining this prohibited him from getting on with his work (she understood this, because she too was a perfectionist) and articulating his thoughts in a comprehensive manner. Deanne had never described Toby as a perfectionist, but certainly his procrastination, particularly apparent during written activities made this worth considering. Peters (1996, cited in UNSW Counselling Services, n.d.), explains procrastination can be one characteristic of a perfectionist student which may contribute to underachievement. An entry in Deanne's journal revealed the extent to which this had become problematic for Toby: "Sometimes he spends the whole time thinking and there is no visible output". A possibility worth considering was that Toby's 'perfectionism' was inhibiting his achievement at school.

The meeting ended with Deanne explaining she would use the forthcoming holidays to thoroughly plan for the implementation of the IEP, and that it would 'begin' after the holiday break.

Zara's IEP

The IEP meeting with Zara and her mother proved straightforward and positive. Both Zara and her mother were keen to be at the meeting, evidenced by Zara's eagerness to get started, and her mother's responsiveness and willingness to participate in any way she could. Jamie's reflective journal entry explicates:

I feel Zara's mother was very pleased to be able to have an input into her daughter's learning. It was great to see Zara glowing with enthusiasm to try

new things. I know I have chosen the right child for this project. It would be great if more parents were willing to have such an input into their child's learning.

Zara articulated her own desires: she wanted to “do a project”, probably about an animal. She also wanted to “do more poetry” and use a thesaurus. Zara's mother wanted what she had been advocating for since early in the year, for Zara to “think deeply” about what she was reading, and to be more challenged. Jamie thought Zara could develop more confidence in verbal presentations.

It was decided that Zara would undertake a study of her choosing, and present that work through a medium of her choice, for example, power point or a poster, following a criteria set by herself and Jamie. As Jamie was keen for Zara to develop higher order thinking skills (PROBE indicated she was having difficulty with inferencing, evaluating and reorganising what she read) Jamie's class programme would make far greater use of de Bono's Thinking Hats and Bloom's Taxonomy to assist in the generation of higher order questioning. Zara too would devise her own questions as a guide in her animal study. Finally, Zara's mother would take her to the town library to seek out poetry books and novels of her choosing.

The meeting concluded with Zara keen to begin her new programme and her mother apparently pleased, for as we left the meeting room, Andy chatted briefly to Zara and her mother. He later remarked it must have been a successful meeting as “that mum had a positive aura about her.”

As Jamie and I walked back to the classroom, she remarked regarding the IEP, “Well, that's my planning for the term for that top group.” I questioned exactly what she meant, and she explained that if Zara wanted to do an independent study, then there was no reason the whole group couldn't do the same: what was ‘good’ for Zara was considered ‘good’ for the group.

An email from Jamie the following day affirmed Zara's continued delight: "Zara was glowing on Thursday morning. She is very excited."

Chris's IEP

Like Zara, Chris was fully involved throughout the IEP meeting and had no difficulty asserting what he would like for his reading programme. Although Helen did not share this at the meeting, she was concerned that Chris was not showing the excitement about reading he used to express. She was keen for Chris to regain his 'spark', and she held expectations that this research would "meet his needs better than what I was doing in my reading programme."

Chris's teacher and parents were specific in their desires for him: his mother wanted him to develop perseverance, to plan something out and bring it to fruition. His father wanted more 'research type work', alongside creative approaches, like the writing of alternative endings for plays. His teacher wanted Chris to develop deeper level thinking when responding to texts. Chris himself wanted to "do a study on cats." This was met with an element of surprise by all, as no one knew Chris was interested in cats, but Chris was adamant; he loved cats, and he wanted to learn about them. He also wanted a lot more time on the computer, and to be able to read more books that were interesting to him. We suggested Chris access the school library to select his own books, to which he replied "I don't like the library." This comment puzzled both Helen and Chris's parents, and upon further probing, it was established what Chris didn't like about the library was that he did not know how to find what he was looking for; no one had ever shown him. Helen later commented to me: "He's such a bright boy, we just took it for granted he'd know [how to use the library]."

It was clear that Chris's passion for computers should be incorporated into the IEP, for early on Helen had identified Chris as very capable with the computer. We asked Chris if he would like to use the computer as both a research tool, and a presentation medium, by learning how to use power point, to which he enthusiastically agreed. We decided to ask a senior student from Chris's 'buddy class' to tutor Chris in the use of power point.

Apart from the independent project, it was settled that Chris would select his own books for his fluency box. Helen would take him to the book room and let him explore books at a higher level, and he could select any of his choosing. The class would use more drama, for Chris liked 'doing plays' and the teacher aide would take Chris to the library and show him how to access the books for his study. Finally, Chris's parents were given a copy of Bloom's Taxonomy. We explained its use in extending Chris's thinking through questioning, and invited his parents to use the taxonomy themselves during Chris's home reading.

At the conclusion of the meeting Helen appeared most pleased and commented "I can't wait to get started."

The gifted and talented education advisor

At the team's request, I had arranged a meeting with the gifted and talented education advisor, Bev, to discuss any issues relating to our gifted students and their programmes. Andy expressed interest in attending this meeting as well, and we all met early in holiday break.

Andy was keen to share his inquiry learning vision for the school with Bev, who in turned shared the TASC (Thinking Actively in a Social Context) model, developed by Belle Wallace. It proved a fruitful discussion for Helen, who later told me, "it was nice to hear what he was saying and how it fitted in." Helen also expressed an interest in researching further the TASC model for herself.

Much of our session involved describing the students to Bev, and explaining our progress to date. Bev demonstrated 'advanced' ways we could use PMIs and the Thinking Hats, explaining that for gifted children, the models could and should be extended further. For instance, a regular PMI whereby children list plus, minus and interesting points, is developed further by establishing 'themes' and each of these themes is then explored in terms of its plus, minus and interesting points. Similarly, the Thinking Hats promote deeper thinking when used in selective combinations: for example, when exploring 'emotions', the red hat (how do I feel), combined with the

white hat (what do we know about the situation), combined with the green hat (what are the alternatives) and the blue hat (what is the conclusion) offer far greater scope for deeper thinking than simply asking children to use red hat thinking (how do I feel?).

Bev continued to share ideas and resources, and assisted the teachers with planning ideas for their upcoming inquiry focus 'serving others'. She discussed Toby and the notion of 'flow' with Deanne, and Deanne commented later how helpful it was to hear Bev's explanation of this. The meeting lasted several hours, and the team were united in their belief that it was "well worth giving up a day of their holidays for."

Three level guide to questioning demonstration

Early in the new term I modelled the use of my chart for each teacher, using a journal story of their choosing. I had created a chart for each class for the teachers and students to access as necessary, and it proved a popular aid towards articulate questioning. Jamie recorded: "It has helped me to differentiate between literal, inferential and evaluative questions. Through these I have been able to develop questions for the students and in turn they have been able to come up with higher order questions for themselves, and each other." Helen remarked how much her class enjoyed the chart, "It's such a nice easy explanation about questions and thinking."

Deanne used it as a follow up activity to instructional reading, and an alternative to a written activity:

I would do that [the chart] with those groups and they wouldn't go away and write about it, they would think about it, they would create questions. They would question each other and they didn't have to write anything, and they went away happy because they didn't have to write.

Gail's demonstration

At the beginning of the new term Gail modelled a 'thinking' session for each teacher in the team. She had been delighted to be asked, adding she thought it a wonderful

idea, and would offer a demonstration session for each class in the school. For our team she used a sophisticated picture book, and a scenario she had devised using clip art as a 'hook in' activity.

Deanne and I attended Gail's session together. It was to prove, for Deanne, a defining moment as she suddenly realised the power in 'hooking in' students, tuning into the scenario, sharing prior knowledge, and posing questions:

Sometimes I've just done it automatically, and I haven't realised that that has been the reason it's been so successful. I've hooked them in but I haven't actually put that name on it. Now I see the significance, actually, it's not just an 'add on', they actually have to be hooked in.

At the end of the project Deanne told me that she had been so impressed by Gail's session, that she had asked if she could return to watch another. She described Gail's session as an 'epiphany', it had changed her teaching.

For Helen and Jamie, Gail's demonstration proved equally as valuable. Helen remarked that watching Gail's questioning skills was highly valuable, while Jamie noted:

It has shown me how inquiry learning can be part of everyday learning and not everything has to be done with pen and paper. The hands on activities can be just as valuable, if not more than writing. The interactive talking that came from the students was incredible. There was a lot of talking but it was on task talking and problem solving.

Conclusion to results Phase Two: Striding out

The team were now well on their way to implementing the IEPs, but more than this, they were developing assuredness and self confidence in their ability to plan and implement a differentiated programme for their gifted readers. They had been

introduced to several new constructs and strategies in a relatively short time span, yet they appeared eager and willing to meet any challenges and try new initiatives. Their introduction to IEPs had been a ‘baptism by fire’ so to speak, yet their desire to do the best they could for their gifted readers seemed the only motivation they required, and in true Kiwi spiritedness, they were keen to ‘give it a go’. The warm rapport between the teachers, their students, and their students’ parents was unquestionable. It was clear I was working alongside three dedicated and devoted women.

Discussion Phase Two: Striding out

Giving them what they need and what they want

Tomlinson (1995) advances the necessity of five essential skills on the part of the classroom teacher in determining successfully differentiated programmes: the ability to assess student readiness; the ability to figure out student learning needs and preferences; the ability to create a variety of ways for students to gather information and ideas; the ability to develop varied means for student exploration and ownership of ideas; and the ability to present an array of avenues for students to express their understandings. The teachers in the study capably identified student readiness and to a degree, understood their student’s learning needs and preferences, but the need for development of the latter three skills, what I term ‘tools for the toolbox’, appeared the greatest stumbling block towards differentiation. Once we shared ideas and discussed their appropriateness, the teachers gained in confidence in their ability to meet their student’s needs.

However, it took the IEP with its specific framework (recognising needs, setting goals, identifying resources and establishing an evaluation criterion) and its principles based on collaboration and communication to enable the teachers, their students and their students’ parents to compose a score that would harmonise both the needs and wants of all involved.

The IEP: Personalising learning the student's way

All the children stated their preferences for their reading programmes, with Zara and Chris readily expressing their desires. Interestingly, the very approaches the children themselves identified (independent studies, drama, art, and guidance on choosing books) are some advocated in the literature as the most apposite towards the differentiation of reading programme for gifted readers (Abilock, 2004; Cathcart, 2005; Catron & Wingenbach, 2001; Dooley, 1993; Halsted, 2002; Hartley, 1996; Moore, 2005; Reis et al. 2004; Vosslander, 2002;). It appeared these children knew what they needed, and what they wanted.

Mason et al. (2004) promote student led IEPs as a way of teaching students to take ownership of their own education, increase self confidence and advocate for themselves. This is precisely the outcome experienced by Zara, as noted by Jamie: "Zara has enjoyed having an input into her own learning. She has become more confident in herself ... the IEP meeting gave 'power' to Zara."

The opportunity to sit down with your teacher and parents and state what *you want* must be empowering for a student of any age. Although the students in this study did not lead the meetings as such, they were consulted throughout and encouraged to share their ideas. Given our current educational trends towards the personalisation of learning, student led IEPs appear a feasible if not obligatory occurrence.

The IEP: Parents as partners

Each teacher in the study believed they enjoyed an open and communicative relationship with the parents of their students, the vital component to the success of the IEP (Ministry of Education, 1993). Certainly, Toby's parents were daily visitors to the classroom, and Zara's mother regularly called in to see Jamie. It was evident during all the IEP meetings that a warm rapport existed between the teachers and the parents, and some parents openly expressed great admiration for their child's teacher, with comments such as "I take my hat off to you teachers, I couldn't do what you do" occurring more than once. Perhaps this accounts for, what I believe, were highly

successful, highly productive meetings whereby all parents appeared secure in expressing their hopes and goals for their child.

Parents provide glimpses into their lives with their children in ways the children themselves cannot convey. From Zara's mother we learned the pride of place reading held in their family; Zara's grandparents had bought her the entire set of Famous Five books, and reading from them was a daily ritual for Zara and her mother. Chris's parents shared with us his need for imaginative play, and how he and his older sister spent considerable time creating make-believe games. Toby's mother explained that she completely understood Toby's "perfectionist thing" as she was a perfectionist herself. Such interactions prove invaluable in helping the teacher gauge the 'wholeness' of a child and the IEP meeting proved just the forum for the gleaning of such precious insights.

Teachers teaching teachers

Throughout my professional career of 15 years I have bemoaned the fact that I have rarely been allowed to spend time observing a colleague teach as part of my professional development. I tended to catch glimpses of my peers 'at work', but a quick visit to another class or a shared class activity does little towards promoting the kind of collegial expertise sharing I advocate. Perhaps that is why I was so ready to secure the services of Gail and Bev, and why I was so willing to model the use of my questioning chart for the teachers; I know the inherent value in learning from each other (after all, we promote this with our students all the time). So, it seemed a rather natural course to share our collective proficiency.

For Deanne especially, the modelling sessions proved invaluable. That she sought out another session with Gail highlighted for me her need to learn from her very experienced colleague. Perhaps it was because Deanne was still a 'new' teacher, in only her second year that she embraced the modelling sessions. Or perhaps the sessions were focussed, timely, personal and pertained directly to personally identified needs that made them so highly valued. At any rate, the harnessing and sharing of collegial experience and expertise is something to be highly valued and

readily promoted within a staff. It is, in fact, a step towards personalising learning, as recorded by Jamie:

I have gained so many ideas for use in my class next year with older students. It has made me realise how important and valuable it is to work with teachers within and outside of the school. Collaborative learning and teaching works well to enhance the learning of our students.

Conclusion to discussion Phase Two: Striding out

What appeared to be the greatest limiting factor towards the differentiation of reading programmes for young, gifted readers was teacher 'know how'. Although they readily identified their students as 'needing more' their shortage of 'tools' proved problematic. Once they were presented with various strategies and approaches, and afforded the practical opportunity to observe other teachers teaching, the team were keen to set about changing their reading programmes.

Yet altering reading programmes alone will do little towards enhancing the learning opportunities for gifted readers if they themselves are detached from identifying their needs and wants and establishing their own learning the goals. That students, even those as young as six and seven years, can engage and productively interact in the making of decisions which directly affects their learning must be seen as a feat of considerable magnitude. It was the IEP meeting forum that proved the ideal opportunity to empower the students, for when sitting alongside their teachers and parents, they gained a sense of importance and connectedness to their own learning. In a similar way, the parents understood their significance as the 'experts' and readily shared their insights and desires for their children.

Results Phase Three: Standing out

Final focus group meeting: Transformations

We met as a group for the final time the first week in November. The IEP implementation had been underway for approximately six weeks, and it was evident significant transformations were taking place. Much of our discussion centred around the changes that were occurring within the teachers, their programmes and their students. In response to the use of higher order thinking skills, Jamie commented:

I've changed the way I do my reading. I think the kids are getting a lot more out of it when they're actually verbalising ... getting them to do the thinking rather than sending them away to do a worksheet. Half the time I never mark the worksheets anyway.

Like Jamie, Deanne too was spending considerably more time using higher order thinking activities, and it occurred to her the students were “more focused at reading time when they are able to discuss things and have some non-written activities.” She was using my three level guide question chart with at least half the class during reading time now, and had witnessed a considerable leap in the PROBE reading scores. She attributed this directly to teaching children the different types of questions, and how to ask them. This meant that during the PROBE test, she was able to say, “Okay, I am going to ask you a yellow question now” and the children knew yellow pertained to inferential questions, and inferential questions meant you had to search for ‘clues’ in the story, as indicated on the chart. Deanne was most delighted with the positive changes in many of her students, but Toby himself was not having a good term.

Toby had returned after the holidays very unsettled and was then absent for a week. In fact, Deanne felt the IEP had done very little for Toby, he just wasn't “putting the work in.” With the emphasis now off written work, we felt certain Toby would be happily presenting his ideas using art and drama, but this was not the case. Deanne was puzzled:

I wonder if there has to always be a concrete output for someone like Toby. Maybe a justifiable output is that his thoughts have been challenged, or made to travel on a path that they would otherwise not have gone. Maybe he needs to be the one to express what he feels about new thinking, rather than a specific task given.

Yet Toby was not ‘expressing’ much other than challenging behaviour. Deanne felt certain the IEP goals were “too broad” for Toby, and she would need to “spell out” for him precisely what it was he had to do, and how to do it, for he simply was unable to “manage himself.” I suggested perhaps Toby needed more instantaneous feedback and that it was not particularly helpful for him to know he had four days to complete an activity and then present it to the group. He needed small, manageable steps and frequent, positive feedback, for not being able to complete any work was not conducive to his feeling good about himself. Deanne agreed she would take a different approach with Toby. She then explained one of the problems was the amount of time she was out of the classroom. As a second year teacher, Deanne was given one day a week release from the classroom. This, coupled with her regular classroom release time meant there was never a week when she was in the classroom fulltime. This break in continuity meant following up work with Toby became highly problematic.

However, both Jason and Samantha who were in Toby’s reading group were “really benefiting” from the change in the programme, Deanne stating, “in some ways I think Jason is getting more out of it [than Toby]”. Despite Toby’s absences, and seemingly unenthusiastic response, Deanne had continued to differentiate the reading programme for the other students, recording:

I am aware that the benefits have extended far beyond Toby. The benefits have been:

- Seeking to provide differentiated learning for the GATE group.

- Challenging the thinking processes of those in the class who can decode but are not in the habit of looking beyond literal meanings.
- Allowing more choice for the GATE group so that they can do thinking that they are interested in.
- Reading independently but with a clear focus and guided discussion.

In a very similar manner, Jamie's reading programme had undergone profound change. During the holidays she had attended a professional development course on the use of information technology with students, and had taught Zara and three classmates how to use photostory (a 'junior' version of power point). Jamie tied this to their inquiry focus 'serving others' and each child had to select a member of the school personnel and interview him or her as to how they 'served others'. This involved composing questions, recording answers, taking a photo of the interviewee, and creating the photostory on the computer. The stories were then compiled collectively, and a 'mini show' was to be presented to the class. As well as photostory, Zara and her reading group had very successfully undertaken independent 'animal' studies, again, composing their own question to focus their study. Jamie had also encouraged the group to devise their own evaluation criterion for the study. She later told me had it not been for Zara wanting to do a project as part of her IEP, she would never have thought to allow this group the opportunity to undertake independent studies.

Helen too, was highly enthusiastic about the positive changes she had witnessed not only in Chris, but in his friend Danny. She had described the project as a "turning point" for Chris, stating, "he was a different boy." The use of the computer had fueled his desire to research and find out as much as he could. The teacher aide had shown him how to locate the books he needed in the library, and he was happily searching out more information. But an unexpected spin-off had been for Danny. He had been so fascinated and totally engrossed watching Chris use the computer that he had been asking his mother to show him how to research and download photos for his own project. Helen later told me that Danny's mum had said "Last year Danny was not focused at all. This [project] has really got him into the computer. He can't wait

to work on it.” Danny had also become far more confident, starring alongside Chris in their class play performed in front of the school. One of Chris’s IEP goals was to participate in more plays, and the creation of this opportunity had allowed not only Chris, but Danny to shine also.

Helen had become so convinced by the power of the IEP in giving Chris a voice in his own learning, that at her recent appraisal meeting she had shared this with Andy. Andy too could see the value in offering this opportunity for all students, by encouraging them to attend parent/teacher interviews. In effect, these would become parent/child/teacher interviews, an idea worthy of consideration for the following year.

Helen and Jamie thought the timing was right for their students to access their IEPs and highlight the goals achieved to date. This seemed an excellent way of keeping the children in touch with their plans, which I stressed, must be seen as ‘living documents’ if they were to remain as relevant and meaningful to the children as when they were written. For Toby, we thought it appropriate he look at the IEP and select just one goal, and focus an activity around that, for example, creating a simple photostory as a way of communicating one idea.

The meeting ended with the setting of the final observation dates for the following week, and the final IEP meetings for the week after that. The semi-structured interviews would occur at the end of November.

Final classroom observations

As I entered Jamie’s room for the final in-class observation, I noted immediately how engrossed Zara and her reading group appeared, working on their animal studies. The group of four girls devised their own research questions and were now researching them as part of the project. Zara’s approach was somewhat different to her peers, as she had read all the information first, and then created questions to fit what she had discovered. As a result, her booklet was not as complete as her peers, but she was extremely content explaining the best thing about the study was being able to “go to

the library and use the internet to find the answers.” Zara had chosen the ring-tailed lemur as her topic, an animal that had apparently interested her for some considerable time. The girls had collectively devised a ‘success criteria’ which, upon completion, was ticked by a peer, the teacher, and the student herself. According to the criteria, the booklet must: have a title; have a contents page; be presented with colour and pictures; use correction punctuation; and all sentences must make sense. We sat outside as the girls took turns to share their studies with me.

As part of their photostory presentation, ‘serving others’ the girls had asked if I would participate. This involved me being interviewed, having my photo taken and the girls creating the story on the computer. As they busily worked away, I reflected on their intense level of interaction; first with each other and the task at hand, but also with the technology. I could not help but compare this focused, conscientious group with the giggling, fidgeting girls I had met exactly three months earlier.

The day of my final observation of Chris proved to be a most exciting one. Chris’s buddy from the senior class was coming to show him how to use power point. Chris’s cats’ study was now complete, and the result was a very large poster, answering all Chris’s own questions. He had used the computer to locate information and to create headings and text, and had fashioned a most attractive study, complete with photographs of his own cat. The next step was to take key information off the poster, and use it to craft a power point presentation, which he would share with some other classes.

Chris showed me his IEP, which he had recently highlighted to reveal the goals he had met. Helen and Chris had reviewed the document together, and Helen commented: “If I did it again I would give him a plan to keep himself, rather than me just having it here - for him to take ownership of it”. The highlighting had proved a powerful exercise, as Chris appeared enthusiastic about his own progress, as was Helen, commenting, “He has just blossomed from this. To see someone in my class learning as a result of what we’ve done - it’s boosted him - he’s so confident in

himself". As I left the room, I noted how engrossed Chris appeared, exploring the power point animation schemes, with an equally immersed Danny watching on.

Toby was absent the day I had planned for the final observation. I spoke to Deanne that evening by telephone to arrange an alternate date, and our conversation created an opportunity for her to share some insightful reflections concerning Toby and his IEP. Deanne wondered if the decline in Toby's behaviour this term did not coincide with the IEP implementation explaining the IEP had 'spotlighted' Toby. I questioned how this could be negative, given the IEP was a celebration of his great reading, and it was meant as a tool to help him thrive even further. She explained that if in fact Toby was a perfectionist, 'spotlighting' him only resulted in his being harder on himself, for having been 'elevated' and made to feel special by having an IEP, it was now even further to 'fall' if things did not go just right. Certainly, he was very reluctant to undertake any work this term, particularly any group work.

Although Toby's reluctance to work continued to trouble Deanne, particularly considering the IEP evaluation criteria was based around observable goals, she reasoned the IEP was not about the output of "stuff". This was difficult to accept at times, mainly when the teachers would chat amongst themselves concerning their programmes:

I did find though I had to not compare what I was doing with the others [teachers] because they had quite a different approach ... and I had to remind myself that I had a totally different child ... I saw Jamie doing those studies and things, that wouldn't have suited Toby, too much writing and gathering information ... If I'd have taken Jason as my person for this, man, you would have seen stuff because that's the sort of kid he is. He'll go home and do stuff, he'll come back and do stuff, he'll just do stuff ... It's not about stuff, and that's the conclusion I had to come to ... It was about getting Toby to work in different ways - to think - to unlock some of that thinking - to motivate him in new ways.

The final IEP meetings

The final meetings took place near the end of November. For the children, their parents and their teachers, the occasions proved particularly celebratory, as accomplishments were shared, and achievements reviewed. The meetings also proved ideal forums to consider the beneficial features of the IEP in differentiating reading programmes for young, gifted readers.

Toby's final IEP

By the time we met in late November, Toby had written a text to accompany a photo of himself on photostory, and this was shared at the meeting. The picture depicted an angry Toby draped in a large piece of fabric, the caption reading: "I am a cool explorer who let a trap off when I was in the jungle." Deanne explained that this activity was completed successfully as she had allowed Toby to continue working on it rather than interrupt his 'flow'. Where once she would have fought to get him to "come to the mat", she now allowed him to complete his task. She stated, "the IEP has helped me understand that transition is important. Flow is important."

Deanne also had recorded a puppet play I had helped Toby and his group produce the day of my final observation, and this was played for Toby's mother as well. Toby's mother expressed how helpful the IEP meetings had been in "sitting and talking and focusing on the positive." She felt she didn't have "that much to do with his education", so this was a good opportunity to think about him and what was happening at school. She elucidated further the notion of Toby's perfectionism, describing it as, "The rough copy needing to be as good as the final." There was, she felt, a need far greater than assisting Toby to articulate, it was finding out why he is a perfectionist.

Straight after our last IEP meeting, Toby's mother had taken him to join the town library. Toby had enthusiastically shared his new library card the following day at 'news' time, prompting another boy in the class to join the library that same day. The library had proved beneficial for Toby because according to his mother, it was something he could do independently. In the three months since the implementation

of the IEP Toby's reading level had increased, and Deanne later told me she felt that was due to the choice Toby was being given in his selection of reading material, and that she had been allowing his group far more time to read independently, a measure advocated by Hartley (1996) as necessary for gifted readers.

Toby's mother asked Deanne how long it had taken her to realise he was a good reader. Deanne explained quite awhile, as his difficulty in articulating his thoughts made it appear he did not comprehend what he was reading. We asked Toby's mother if it would be helpful to meet with Toby's teacher for the forthcoming year, and she thought this a great idea, adding, "If I was that teacher I would want to know what to do with him." She wasn't particularly concerned if she herself attended the meeting, just as long as the new teacher was made aware of Toby's abilities and needs, and he did not "start the year on the back foot."

Zara's final IEP

The meeting with Zara and her mother commenced with Zara opening the photostory programme and locating the correct file herself, then presenting the 'serving others' show. Her mother was delighted, adding it was so helpful to have this follow up "feedback session" as weeks had gone by and she had not had the opportunity to call in. Yet the meeting proved equally helpful for Jamie, as Zara's mother shared some insightful observations.

Zara's mother described the IEP as a "fantastic process" adding Zara had had an "awesome time in her little group with all her projects to get on with." She noted Zara's "confidence was growing", explaining this was particularly noticeable when they shared their evening Enid Blyton reading sessions. Apparently, Zara had become far more interactive with the stories and was now analysing the texts based on the predictability of the plots and characters, something she had not done prior to the IEP. Jamie thought it highly likely this was due to the higher order thinking skills she had adopted as part of her regular programme.

Zara's mother commented that she thought that had the IEP been implemented from the beginning of the year Zara's enthusiasm would have been far less likely to have waned. This led to a discussion concerning the possibility of the IEP being written in a different format, perhaps 'kid speak', and the child keeping a copy in their desk, and ticking off their goals as achieved. Zara's mother commented "there must be a lot of kids who would have goals similar to Zara's but you could personalise each IEP by adding details pertinent to that child."

It appeared our time together provided the impetus Zara needed to remain focussed. A chance meeting in the supermarket with her mother later that week revealed how our final meeting had served to "spark Zara off again" and she was "all keen to get on with her Enid Blyton author study."

Chris's final IEP

Chris was eager to show his parents how he had highlighted the 'goals achieved' on the IEP, and together they talked through each one. Chris was now selecting his own books from the bookroom for his class fluency box, Helen commenting: "Why have books you have already read in a fluency box? He's such a fluent reader, he can read anything at that level." Helen had organised for the student teacher to take Chris to the library and show him how to select books, and Chris's mother and father had been buying him more detailed information books and chapter books. The effect, Helen felt, was a "far more enthusiastic Chris at reading time, keen to get on to the next book."

One of Chris's IEP goals was that he be involved in more plays, and also re-write the ending of a play. His mother commented how surprised she was at his level of confidence when he had appeared on stage in the class play, adding "he's never been one to draw attention to himself, but he's really moved on since last year." Helen explained that as a direct result of Chris's IEP, she had incorporated 'plays' in the class programme, and "everyone had got on board doing plays."

Judging from Chris's animated behaviour, he couldn't wait to show his parents his power point presentation, and this was excitedly received by all. His mother was particularly impressed by his use of the terminology, such as 'custom animation'. She shared how motivated and enthusiastic he was and how in the past five weeks she had not once heard him say, "School is boring", a previously regular occurrence, adding, "Usually two-thirds of the way through the term he's complaining he's tired and doesn't want to go to school."

It was evident much had been achieved during the implementation time: the cats' study and poster, the power point presentation, the play presented to the school, and now the re-writing of the play's ending. But other transformations were taking place as well.

According to Chris's mother, she had noticed a real change in Chris's 'thinking'. During conversations he appeared far more engaged, asking questions such as, "What would have happened if ...?" and "What if this had happened?" This appeared very similar to how Zara's mother had described the change in Zara's interactions during reading. Helen felt certain this was due to the use of the Thinking Hats, Bloom's Taxonomy and the many PMIs they conducted as a class. As well, she was now reading chapter books to the class too, encouraging them to visualise the events, and interact with the text in deeper ways.

With all that had been achieved, Chris's mother commented to Helen that the IEP must have been a lot of work for her. Helen stated, "Actually no, because it became the plan for the group for the term. The power in the IEP is that it took the needs of Chris into account by addressing them within a group setting." I reflected how inclusive, rather than exclusive, this IEP process had been for Chris.

Semi-structured interviews

The semi-structured interviews were held at the end of November. I wanted to allow each teacher the opportunity to independently reflect on their experiences, to share

openly their highlights, challenges and any issues which had arisen throughout the project.

Changing professional relationships

Each teacher identified the project as having enhanced their relationships with each other. It was the collegial, collaborative experience which drew them close:

It's brought the three of us together and we quite often talk about how our kids are going, and what different things we could use ... It's just that we did a lot more talking than I think we probably would have.(Jamie)

It has encouraged good - better relationships actually, cause we're working together, helping each other (Helen).

We're on the same journey and talking together about you know what's happening and choices we've made within the programme and what we're doing and how we're moving along. (Deanne)

Helen felt certain the IEP had enhanced her relationship with Chris, which had always been good, but:

Now is absolutely fantastic. He's become very special, and his family. I would say he will be grateful for this, because he's just happy, such a happy little boy. He loves challenges and this has just opened him up and I'd say it has actually changed his life.

Jamie believed her relationship with the principal Andy was now stronger. He had frequently inquired as to how the project was going, and he had expressed to both Jamie and Helen the possibility of assuming leadership roles the following year when the whole staff underwent professional development in gifted and talented education. She also felt she better understood Zara's mother's point of view concerning her

desire for Zara to be extended, and found her mother to be “very supportive” throughout the IEP meetings.

Changing professional practices

As a result of the project, each teacher altered their teaching practices. This was perhaps most evident in their use of higher order questioning and thinking strategies such as Bloom’s Taxonomy, de Bono’s Thinking Hats, and graphic organisers such as PMIs. However, and arguably most importantly, their teaching philosophies appeared to alter to take into account the need to differentiate learning programmes:

Instead of thinking of the kids as a whole group, probably thinking of them more as individuals ... in that each of them have got something to offer, and they all have their own directions that they want to go into. You have to be able to give them that opportunity to be able to express that themselves ... I think going from more teacher directed into both a mixture of teacher and students working together, probably more than me telling the kids what to do, we do it together. (Jamie)

One of the things that I have valued from this research programme is that it is a constant reminder that the GATE learners are there waiting to be challenged and extended. In a busy classroom it is so easy to focus on the needs, rather than the goals and objectives. The neediest learners can take the majority of the time, and the capable will keep going but will not develop at their potential if they are neglected. (Deanne)

... when I realised letting Chris just go for it and the valuable things he could get out of it and not me just controlling what I wanted him to do. Well, it was that personalised learning, I suppose. I realised that it really did work, so it motivated him to read, he wanted to read ... I’ll be doing a different sort of planning next year keeping this in mind. (Helen)

Challenges and issues in implementing the IEP

Each teacher identified issues in implementing the IEP. Jamie felt there were too many goals to achieve. Zara's IEP contained three: to develop confidence in her verbal presentations; to develop questioning skills in order to generate higher order questions; to extend her vocabulary using a thesaurus. Jamie felt once the IEP was written, she needed to "fit in all the goals" and this proved difficult. She noted in her reflective journal: "Only one goal was achieved however many facets were achieved within that one goal such as interviewing, questioning, writing projects, photostory, presenting, photography, working with others and many more."

Deanne too, felt certain Toby's IEP comprised far too many goals, the goals were too broad, and she did not have enough time to spend becoming familiar with some of the strategies. Although the goals appeared achievable at the time they were written, unforeseen circumstances such as the computers being out of order for three to four weeks, Toby being absent for several days, and his oft times challenging behaviour, meant it had become extremely difficult to implement the plan. She felt Toby's goals needed to be "short and achievable" perhaps even "set each day". Deanne termed the IEP "a burden at times", recording in her journal "if I did it again I would include some behaviour goals, and only one or two learning goals so the focus remained narrow and learning was thorough."

For Helen, the coordinating of the IEP meetings with Chris's parents proved an issue "because they are busy people and that is a stressful thing trying to tee that up." This meant our meetings had to be conducted very late in the afternoon.

Conclusion to results Phase Three: Standing out

The term 'standing out' signifies 'setting apart', a kind of distinction. There is no doubt that these three teachers were now distinctively different to the somewhat tentative team I had met several months earlier. Certainly their teaching practices had altered, as they now sought to differentiate their reading programmes for their gifted readers. Yet something more had occurred. If a teaching philosophy guides the

actions we take, as asserted by Holly, Arhar & Kasten (2005) then unmistakably philosophies had changed, for these were now three very different classrooms.

Perhaps the principal Andy, whom I met with at the conclusion of the study, expressed it best: “There’s been a shift in thinking, a ‘paradigm shift’ which has released the ‘guru’ within.”

Discussion Phase Three: Standing out

The IEP: Releasing the guru within

It appeared the IEP, with its principles based on collaboration and communication, and its practical, highly ‘workable’ framework had created a powerful conduit by which to channel the very best educational practices we had to offer these young, gifted readers. In this regard the effectiveness of the IEP is incontestable, and as the project unfolded, this became highly apparent in several ways:

1. The IEP meetings provided forums to share our collective ‘expertise’, as together we set goals, planned programmes and finally, celebrated achievements.
2. The IEP plan itself became a ‘work smarter’ tool, its goals and strategies providing a differentiated teaching blueprint for not only one child, but at least one reading group in each class for the entire term.
3. The IEP plan became a kind of ‘best practice’ model for the teachers, resulting in inclusive, rather than exclusionary practices for the gifted readers.
4. The IEP process served as an impetus for teachers to explore and modify their teaching philosophies, programmes and practices by focusing specifically on their gifted readers, which in turn caused the teachers to reflect on their practices for all children.

5. When explored as part of this action research project, the IEP appeared to enhance collegial relationships.
6. The IEP process allowed the children involved to state their needs and desires, thereby creating the opportunity to personalise their learning.

1. The IEP meetings: Expertise and insight forums

Our IEP meetings themselves proved relaxed, congenial forums by which to share fundamental information. Jamie described the meetings as giving “power to Zara and power to Zara’s mother.” The ‘power’ Jamie referred to was quite possibly the power that comes with knowing you are being listened to and taken notice of. Certainly, everyone in attendance at the meetings was given an equal opportunity to express their feelings and offer suggestions in the design, implementation and evaluation of the IEP. These are the very consultative and collaborative practices which underscore every aspect of effective school-wide special education support systems (Ministry of Education, n.d., b), and lead to the design and implementation of the most appropriate learning programmes (Moltzen, 2005a). In our instance, the collective expertise of teachers, parents, students and other personnel directly assisted teachers towards the differentiation of reading programmes for young, gifted readers.

Hartley (1996) contends genuine, collaborative parent teacher partnerships must be encouraged in an effort to support, extend and monitor the special talent of the gifted reader. For Deanne, Toby’s mother proved an invaluable source in helping her understand Toby’s puzzling behaviour. Although Toby’s parents called on a daily basis, this was to monitor his behaviour; our IEP meetings focused on Toby’s giftedness in reading. Through these meetings we learned of the inextricable link between Toby’s underachievement and his challenging behaviour. Toby’s mother’s description of him as a ‘perfectionist’ aided Deanne in understanding his reluctance to work once the IEP had been implemented. Certainly, Deanne’s suggestion that the IEP served to spotlight Toby thereby making him even more reluctant to work for fear of failure is worthy of consideration:

Procrastination is a complex problem affecting many perfectionists. The fear of being imperfect and the dread of not living up to one's own and others expectations can cause overwhelming feelings leading to profound procrastination. Putting it off until the absolute last second is a painful avoidance tactic employed by perfectionists. (Adderholt-Elliot, 1989, cited in UNSW Counselling Service, n.d., p. 5)

However, a definitive diagnosis of perfectionism was not within the realms of this study or indeed, this researcher. Deanne and I did, however, speak with the senior management at River Crest regarding Toby's abilities and 'issues' in preparation for placement in his new class, as requested by his mother at our final IEP meeting.

Parents can often be the first to note small, but significant changes in skills and behaviours (Ministry of Education, 1998). This certainly held true for both Zara and Chris, as their parents explained the changes in their 'thinking' during home reading and discussions. These insights provided powerful feedback for the teachers as they were able to directly link these observations to the positive changes in their class reading programmes and also, to the opportunities they were providing for all children in their classes.

2. The IEP plan: A 'work smarter' differentiation tool for teachers

Student centred, qualitatively differentiated instruction emphasises three particular elements, all of which appeared evident in the students' IEP plans: *content*: input, what the student learns; *process*: how the student goes about making sense of ideas and information; *product*: output, how the student demonstrates what they have learned (Ministry of Education, 2000; Riley, 2000, 2004b; Tomlinson, 2005b, 2003b). In short, "... what a student learns, how he/she learns it, and how the student demonstrates what he/she has learned is a match for that student's readiness level, interests, and preferred mode of learning" (Tomlinson, 2004, p. 188). The IEPs provided a much needed qualitatively, differentiated planning framework for the gifted readers, as recognised by Helen:

It [the IEP plan] was really good ... we had a really good clear vision of where we were going because this was all done before we started for a whole term ... we knew what we were going to try to achieve and he [Chris] knew what he wanted to achieve; it was all written down and it made it so much better.

Although the IEPs were specific to each gifted reader, their teachers quickly recognised many of the goals and strategies as being pertinent to their entire class, certainly their 'top' reading groups, and sought to use the IEPs as a kind of *group education plan*. In this way, the IEPs value lay in its flexibility as a planning blueprint towards qualitatively differentiated reading programmes for several gifted readers, for the entire term:

... even though this [IEP] is specific for one child it was used for the whole group and within that group they all went in their own directions as well cause they had their own inquiry that they were going into. (Jamie)

3. The IEP plan: Inclusive rather than exclusionary practices

Moltzen (2005a) believes there is a tendency for the IEP to be viewed as a "separate, stand-alone entity" (p. 166) which results in few links being made between the regular classroom programme and the IEP. The challenge, he explains, is to de-emphasise the 'individual' aspect of the programme, which has a tendency to cause professionals to focus on exclusionary practices, and to promote inclusive practices.

Whether it was because the IEPs related to gifted readers, and thereby seemed to present a 'best practice' model for the teachers, it appeared almost 'natural' for the team to adapt their programmes to fit around the IEPs of their gifted readers. As articulated by Helen, "The power in the IEP is that it took the needs of Chris into account by addressing them within a group setting." It was evident the teachers were now providing far more and varied opportunities for their reading groups than they would have otherwise. Zara had wished to undertake an animal study and later an author study, therefore Jamie offered these opportunities to the whole group.

Deanne's quest to have Toby articulate higher order thinking resulted in her 'top' group engaging in far more in-depth discussions during reading times than they had previously. Yet it appeared not only the 'top' readers were benefiting from the IEPs but in many respects, the entire classes, for all teachers were now incorporating higher order thinking activities into their regular programmes alongside their inquiry learning focus, with pleasing results.

The PROBE reading scores across Deanne's class had increased considerably and Deanne attributed this directly to the attention she was paying to her own questioning skills, and teaching the children the different types of questions. Jamie shared an instance whereby a student in her class, not in the 'top' reading group, had come to school with a completed PMI chart on 'firemen' he had constructed at home, and wanted to share at 'news' time. Helen taught a 'drama' unit to her class, stating that because Chris had indicated his desire to be involved in more plays "everyone got on board doing plays." She also recounted instances of pupils undertaking independent research on their home computers, having been inspired by Chris's study. As Helen explained: "It definitely has such a big flow on effect to every other person in the class." Joseph Renzulli's (1998) infamous statement "a rising tide lifts all ships" (n.p.) had suddenly taken on a very real and very personal meaning for me.

4. The IEP process: Focussing specifically on the needs of the gifted readers

For the teachers, the entire IEP process created an opportunity to focus on their gifted readers, and invariably, this led to an examination of their teaching philosophies and practices. It is debatable whether their attention would eventually have shifted to the needs of their gifted readers; certainly, this had not occurred up until the project:

I think there's probably other kids that I've had before that have had that gift [reading] but you are always thinking about the lower ones, you don't think about the ones which are capable of being taken further which is a downfall really because you're holding them back.... It's [the IEP] just made me realise we do need to look at all the kids in the class. (Jamie)

With every week I get more tuned into what works and what doesn't work with him in terms of the way he responds, so I do know him better. Maybe the IEP has helped to actually get to know his response. I can almost tell you how he'll respond before I say something ... so, it's got me knowing him better ... (Deanne)

Without the appropriate curriculum modification, the potential for underachievement in gifted and talented readers is very real. At the commencement of the project, it was evident each gifted reader was underachieving. For Zara this manifested itself in boredom, and her mother advocating for more challenge. Chris had lost his 'spark' and enthusiasm for reading, and Toby, although capable of "way out there thinking" was highly reluctant to undertake any work. With estimates as high as 50 percent of high ability readers not achieving to their potential (Hoover-Schulz, 2005) the role of the school, and in particular, the classroom teacher becomes paramount. For these three teachers, the IEP focused their attention on their gifted readers and in so doing, allowed them to scrutinise their reading programmes, which for Helen, had become "pretty mundane - you know, reading the story and doing follow up work from it."

Crammond (2004) describes reading instruction for the gifted as a complex teaching challenge, requiring an understanding of both the needs of gifted students and the teaching of reading. Yet the fact that the team had had no professional development regarding gifted and talented education did not deter them from participation. Worthy of consideration is the possibility that the IEP itself, with its multifaceted characteristics, flexibility of use, and in our case, narrow focus on gifted readers provided the impetus to participate:

No, it didn't concern me or worry me [that I'd had no gifted and talented professional development] but I felt it was the right time for it, for my class. I could apply it to one particular child in my class in a group who were all really high achieving readers, and it was time to 'give them something' ... (Helen)

The IEPs narrow reading focus held appeal for Jamie, too, "... when you first think about doing them they can take a bit of work ... if you're doing a specific topic, it's a lot easier than doing the whole global thing." She had also begun considering the worthiness of the IEP for other gifted students. Jamie explained she taught two very gifted boys in maths, who had become "a bit bored." When I asked what particular features of the IEP appealed, she explained, "... at the moment, I just give them a couple of things to extend them ... they probably do need a programme of their own ... it would probably focus *me* more ..."

5. The IEP process: Enhancing collegial relationships

Literature from the United States highlights several barriers to the successful implementation of IEPs, one being teacher 'disconnectedness' with the IEP process (Menlove, Hudson, Suter, 2001). Yet rather than disengage, our team appeared to embrace the entire IEP process, according to Jamie, to the point that it enhanced their collegial relationships:

... it's just that we did a lot more talking than I think we probably would have and things that have worked for me might not have worked for Deanne and things she's doing could work for me and Helen, so I think it's probably made us more collaborative I would say - giving each other ideas ... none of us knew each other before this year, so its definitely enhanced it [our relationship]. (Jamie)

Jamie informed me that their interactions occurred on a daily basis, and this involved the sharing of ideas and strategies, but also, the children sharing their accomplishments between classes, such as Chris's power point presentation and Zara's photostory. Yet far more than this, the teachers had developed a 'shared understanding' a collective 'new knowledge' which was proving to have implications for the following year.

The forthcoming staff development focus was to be on gifted and talented education. Andy had told me earlier on that this project would provide a kind of "appetiser" for

the teachers involved. In keeping with his ‘extreme mentors’ and the ‘professional learning circles’ approach, Jamie and Helen may be asked to assume a position of leadership in some way. As well as this, both teachers were changing year levels the following year, and the change meant that they would be able to teach each other’s gifted reader, a logical step, given they had collectively shared the IEP experience.

6. The IEP process and product: Personalising learning

Among its descriptors, the Ministry of Education (2006) describes what personalising learning ‘looks like’:

- Personalising learning succeeds when students know what they know, how they know it, and what they need to learn next.
- Children and young people will know how to take control of their own learning.
- Parents and family/whanau will be partners in their children’s learning.
- Teachers will have high expectations of every student, know how they learn and adjust their teaching to meet students’ learning needs.

There is no doubt the principles and process of the IEP directly align with the Ministry of Education’s (2006) personalising learning initiative. In fact, the IEP appears almost as a roadmap for the Ministry’s (2006) initiative, as the students were directly involved in “knowing what they know, how they know it, and what they need to learn next”. In this regard, the IEP could well be renamed the PEP (Personalised Education Plan) for the children were able to articulate what they wanted to learn and why, help to set their own goals, select strategies and share their achievements.

The collaboration between parents, teachers and students, and between the teachers themselves, coupled with the creative use of the IEP framework to incorporate the ‘interpersonal’ emphasis of personalised learning, had meant for our project, the IEP had proved the ‘bridge’ to personalising learning. Perhaps Helen encapsulated this best when she shared this perspicacious insight:

I suppose when I realised letting Chris just go for it and the valuable things he could get out of it and not me just controlling what I wanted him to do - well it was that personalised learning I suppose. I realised that it really did work. It motivated him to read, he wanted to read, that's how successful it was.

Conclusion to discussion Phase Three: Standing out

This research project sought to answer four questions regarding the use of the IEP as a differentiation tool for young, gifted readers:

1. Is the IEP an effective tool in assisting teachers towards differentiating reading programmes for young, gifted readers?
2. Is so, what particular features of the IEP prove beneficial in assisting teachers towards the differentiation of reading programmes for young, gifted readers?
3. How well do the principles and processes associated with the IEP align with the Ministry of Education's (2006) personalising learning initiatives?
4. What are the shortcomings in the use of the IEPs towards the differentiation of reading programmes for young, gifted readers?

There remains no doubt in my mind, or indeed, the minds of the teachers that the IEP, when applied creatively within classroom programmes so that it becomes an inclusive, interpersonal learning tool, holds immeasurable potential in assisting teachers towards differentiation programmes for young, gifted readers. Its underlying principles based on collaboration and communication, coupled with its succinct and 'workable' framework dovetail precisely with the Ministry of Education's (2006) personalising learning initiative. For the teachers involved in this project, the IEPs provided valuable opportunities to gain insights and experiences which ultimately changed their teaching philosophies and practices. For the children and their parents,

the IEP meetings proved ideal forums through which to 'voice' what and how they wanted to learn. However, the IEP is not without its shortcomings.

For Deanne, Toby's goals had proved too many, and too broad. Although Cathcart (2005) states the goals for gifted learners may be broader than in the standard IEP, for Toby at least, they needed to be narrow and focused and followed up on a daily basis. Toby required immediate and positive feedback, and the setting of long term goals of which we later established he had little chance of accomplishing was not conducive to his feeling good about himself as a learner. Deanne felt certain if she was to use the plan again, she would include some behaviour goals, and in hindsight, this would be an appropriate approach, for Toby's behaviour, his underachievement, his giftedness in reading and his 'perfectionism' appeared inextricably linked. Certainly, for children with behavioural and emotional challenges I would advocate seeking the services of qualified special education personnel when constructing the IEP.

Jamie too felt pressure to 'fit in all the goals' but creatively worked within her classroom programme to create opportunities for Zara to accomplish these. As she noted, the photostory exercise alone created the chance for Zara to write questions, articulate her thoughts, work with others and present to the class, while the animal project allowed her to refine her questioning skills, research using the internet and books, present a project and create an evaluation criteria.

Helen had found co-ordinating the IEP meetings difficult, for both Chris's parents worked, and when coupled with busy after school activities and a full family life, it proved problematic finding a date and time when we could all co-ordinate. This meant we had to meet very late in the afternoon.

Chapter Five

Implications and Recommendations

Introduction

This chapter considers the implications of this project for teachers and their gifted and talented readers, and offers recommendations which may assist educators in meeting the needs of this group, and suggestions for further research. However, as this action research project was a small scale, qualitative study involving three teachers and three students in one primary school in New Zealand, it is subject to certain limitations which should be considered when applying the implications and recommendations to a wider context.

Limitations of the study

- The sample school was a decile five, contributing, primary school with a roll of 455 students in a town in the Waikato. As such, it is not necessarily representative of schools with either a higher or lower decile rating, small rural or large urban schools; pre-schools, middle, secondary, or private schools, or schools within other geographical locations of New Zealand, or overseas.
- The three teachers involved in the study had not undertaken gifted and talented education professional development. Therefore, their interpretations, experiences and conclusions may not necessarily be representative of teachers who are experienced in differentiating provision for gifted and talented students, or indeed, teachers who have had experience in planning and implementing IEPs.
- Qualitative research, while providing powerful understandings, is specific to particular contexts and lacks stability over time. Therefore, such studies

present “truths-in-context” (Stringer, 2004, p. 56), and do not necessarily transcend time and setting.

Implications and recommendations for teachers

Action research as professional development

There is no doubt this action research project, dubbed by the principal a ‘mini-inquiry’ for the teachers involved, served to affirm their professionalism by affording them the opportunity to connect theory with practice, under real conditions regarding real issues. Stringer (2004) maintains through systematic processes of inquiry, such as action research, teachers are able to plan sustained and substantive learning opportunities, which can be built into their ongoing teaching work, “tapping their collective wisdom, and gaining access to other sources of expertise.” (p. 173). When colleagues and stakeholders work together, through processes of reflection and communication inherent in action research, they can identify problems and determine solutions (Stringer, 2004). Importantly, the teachers involved reported enhanced collegial relationships as a result of working closely together on the project. They appeared to develop a ‘shared understanding’, a kind of collective ‘new knowledge’ which caused them to interact on a daily basis, sharing ideas and strategies. Clearly, ‘on-the-job’ professional development is preferable to irregular, distant learning, conducted by a detached provider, as can be characteristic of some professional development models. As a result of this project, it is recommended schools consider systematic processes of inquiry, such as action research, as a form of professional development.

IEPs as ‘work smarter tools’

It must be noted that in my role as action researcher, to a degree, I guided the teachers and their practices. This creates an interesting dilemma and raises two important questions:

1. To what extent is the planning and implementation of an IEP sustainable by teachers, themselves?

2. Is it possible, in effect, for teachers to translate the IEP elements into everyday practices given the busyness of school life and an already overcrowded curriculum?

It is true that in order to plan and implement an IEP, teachers require a certain base knowledge about the IEP's underlying principles and processes. Yet for the teachers in this study, this was easily addressed by way of a meeting discussing the nature of the IEP and sharing examples of plans. Once a fundamental awareness of the IEP had been established, and the teachers had become familiar with a range of strategies and ideas for differentiating their reading programmes, they skillfully set about identifying needs and establishing goals for their gifted readers.

The teachers themselves believe they will use the IEP format independently in future as a differentiation tool for their gifted students, and Jamie considered using it for mathematically able students. Therefore, the use of the IEP as a differentiation tool in one particular curriculum area may well save teachers time and effort, for once set, the plan was easily implemented and maintained, and served, in many respects, as a term's planning for the most able readers, and a best practice model for all students. Although the IEP meetings lasted approximately an hour each, this proved to be an hour well spent as a time of collaboration, communication and planning. It is therefore a recommendation of this study that teachers become conversant in the use of the IEPs as a differentiation tool for gifted and talented students. Given the flexibility of the IEP, when used creatively, it could be applied across a number of different curriculum areas, and for any number of individual needs.

Implications and recommendations for gifted and talented readers

IEPs as personalising learning tools

For the students in the study, the IEP process served to connect them to their learning by offering each student the opportunity to state their preferences, set their own goals and monitor their achievements. Moreover, it involved their parents in an overt manner, giving 'power' to both students and their parents. One teacher recommended that with a small amount of adaptation, the plans could be written in 'kid speak' and

be kept in the possession of the student as an ongoing learning pathway. It does not appear unreasonable to expect that with a relatively small amount of time, preparation, and 'know how' IEPs can be used as personalising learning frameworks for gifted readers. Furthermore, as the children in this study were as young as six years, it is logical to expect children of any age can play an active role in their own IEP meetings. It is a recommendation of this study that all students, gifted or otherwise, not only attend their IEP meetings, but that they take an active, ultimately leadership role during the meetings.

The special case for reading

Worthy of consideration is the suggestion that the use of IEPs for gifted readers presents a special case. Cathcart (2005) informs us that reading is the curriculum area we pay the least attention to for gifted readers, believing they are quite capable of 'making it' on their own. Yet Reis et al., (2004) explains that when the needs of the gifted reader are ignored, their opportunities to learn how to react to challenge are stunted. Gallagher's (2006) study revealed how quickly young, gifted children became despondent after school entry when they did not receive sufficient challenge. For two of the gifted readers in this study, their school lives became far more challenging and fulfilling once their IEPs were implemented, the characteristic boredom diminishing. It is a recommendation of this study that young, gifted readers in particular be given special consideration from as early as school entry, and that IEPs are established as a fundamental tool in the differentiation of reading programmes for young, gifted and talented readers.

Recommendations for further research

As this small scale, qualitative research study was limited to three teachers and three students in one urban, primary school, it is recommended further study be undertaken to include:

- Increasing the participant sample size beyond three participants, thereby providing a comprehensive indication of the usefulness of the IEP for young, gifted readers, on a larger scale.

- Increasing the participant sample size beyond one student per class. This would assist in establishing the efficacy of multiple IEPs being in use at the same time, in the same class.
- Undertaking the study in schools other than an urban, primary school, to include intermediate/middle and secondary schools, and schools with more diverse decile ratings; schools located in rural geographical locations; and schools with greater diversity of cultural groupings.
- Increasing the length of the study, perhaps to become a longitudinal study for the students involved. This would assist in establishing the usefulness (or otherwise) of using IEPs with the same students over much longer periods of time. The length of the study could also be increased to become a longitudinal study for the teachers involved. This would assist in establishing the efficacy of teachers designing and implementing IEPs over sustained periods of time.
- Undertaking the study in curriculum areas other than reading, for example, mathematics and the arts.
- Undertaking a similar study, whereby students are trained to take a leadership role at the IEP meetings, as a step towards personalising their own learning.
- Designing and implementing GEP (Group Education Plans) for gifted students, as opposed to Individualised Education Programmes, as tools towards the personalisation of learning.

Conclusion

It had now been nearly five months since we first met as a team. Our learning journey during this time had been intense, to say the least. Yet in many ways, it was just beginning, for new learning always presents new opportunities, and with those opportunities come the unavoidable challenges. Helen and Jamie would be teaching

new classes next year, at different year levels, and undertaking professional development in gifted and talented education, perhaps taking a leadership role of some capacity. Deanne would eventually be working in a new school, facing the inevitable challenges this always presents. I felt certain, though, that in some way, our project would be preparatory for any further gifted and talented education journeys they may embark upon.

These teachers had embraced a project of which they had no initial understanding concerning practices they had no experiences of, at what proved to be their busiest time of the year. And yet they had met the challenge with fortitude and enthusiasm, and the rewards had been many:

I think that was the key to it all - we were listening to the child ... what they're interested in and what they want to do and it made it more meaningful for them ... It's been a wonderful experience ... just to do all these wonderful things, and this little boy's life has changed. (Helen)

I always believed that everybody in the class including the teacher is an ongoing learner, and I definitely, definitely gained a lot out of this ... and from working with the other teachers. (Jamie)

From my understanding now, differentiated learning is not about "hey these children are further down the track in terms of their levels" - its partly that - but it's more about, "hey they have certain areas of gifting that they can actually fly in these areas and they need to be given the tools so that they can actually explore that area in a deeper way." So it's not giving them multiplication instead of addition. You know what I mean?

Although still a 'neophyte' researcher I too had traveled far and wide. I had set out to establish the efficacy of using the IEP as an assistive tool towards the differentiation of reading programmes for young, gifted readers, and to determine the extent to

which the principles and processes associated with the IEP aligned with the Ministry of Education's (2006) personalising learning initiatives. There remains no doubt in my mind, or indeed, the minds of the teachers that, when applied creatively within classroom programmes so that it becomes an inclusive, interpersonal learning tool, the IEP holds immeasurable potential in assisting teachers towards differentiation programmes for young, gifted readers. Its underlying principles based on collaboration and communication, coupled with its succinct and 'workable' framework, align precisely with the Ministry of Education's (2006) personalising learning initiative.

For the teachers involved in this project, the IEPs provided valuable opportunities to gain insights and experiences which ultimately changed their teaching philosophies and practices. For the children and their parents, the IEP meetings proved ideal forums through which to express their learning wants and needs, and the implemented programmes created challenge, allowing the children the opportunity to creatively explore areas of personal interest.

Finally, I now had a much deeper understanding of the action research road, and my place on that road, as my final journal entry reveals:

... we were all riding the same train. Granted, we may have been in different carriages at times, but we all ended up in the dining car, sharing the feast, together.

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Appendices

Appendix A: Letter to Principals

**Department of Human
Development and Counselling**
The University of Waikato
Private Bag 3105
Hamilton, New Zealand

Laurie Mazza-Davies
Telephone
Email:



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

The Principal

Date

Dear _____

I am a Master of Special Education (MSEd) student at Waikato University, and a teacher with 14 years experience in primary teaching. Currently, I am completing my thesis in special education, with a focus on gifted and talented students.

My interest in special education has led me to consider the possibility of using Individualised Education Plans (IEPs) as a means of personalising learning for young, gifted and talented readers. An IEP is a programme designed for an individual student that allows that student's specific needs to be met. An IEP can provide a focused way for the student, parents/caregivers, teachers and in some instances, other agencies to plan, deliver and assess the student's needs and progress over time.

This research will be collaborative in nature, that is, I seek to work alongside teachers throughout the research project. It is hoped this participatory process will present teachers with an opportunity to explore components and process of the differentiation process, as well as offering students the opportunity to become active participants in their own learning.

The research process would involve:

- Meeting with junior school teachers outlining the nature of the research and inviting four interested teachers to take part.
- Keeping reflective journals.

- Three scheduled focus group meetings at weeks one, three and 10 of the research project, to be conducted outside class hours.
- Two 30 – 40 minute classroom observations with each teacher, in weeks two and nine of the research project
- One 50 minute individual audio-taped interview, at week nine, to be conducted outside class hours
- Two IEP meetings, one at the commencement and one at the conclusion of the IEP implementation period

The school, teachers, parents and students will not be identified in this research, and pseudonyms will be used in all transcribed materials and the final written thesis. Participation is completely voluntary, and participants may withdraw at any time up to the point of data analysis.

Finally, please do not hesitate to contact me if you have any questions or concerns or you require further information. Alternatively, my supervisor, Dr Roger Moltzen, may be contacted at the School of Education, Waikato University, via email: rim@waikato.ac.nz.

If you agree to your school's participation in this research project, could you please complete the attached consent form and return in the enclosed stamped, addressed envelope provided.

Thank you for your consideration of this matter.

Yours sincerely

Laurie Mazza-Davies

Appendix B: Principal Consent Form

I _____ (name of principal) have read and understood the nature of the research project and agree to four teachers from within our school participating as co-researchers in this project. I agree with the following statements (please tick):

I understand that the participation of the teachers is voluntary, and that they can withdraw at any time up to the point of data analysis.

I understand that the identity of our school, the teachers, parents and students participating in the research will be kept anonymous, and any information provided will be kept confidential.

I understand that any documentation resulting from this project, such as the IEPs, observation notes and any audio-taped and transcribed material will be held by the researcher, in a secure location.

I understand the findings of this research will primarily be used towards the completion of a four paper thesis as partial fulfillment of the requirements for a Master of Special Education degree. Seminars, presentations, conference papers and journal articles may eventuate from the findings of this study.

I understand that this research project is being supervised by Dr Roger Moltzen, School of Education, Waikato University, and if I have any concerns, I may contact him via email: rim@waikato.ac.nz

Signed _____ Date _____

Appendix C: Letter to Teachers

**Department of Human
Development and Counselling**
The University of Waikato
Private Bag 3105
Hamilton, New Zealand

Laurie Mazza-Davies

Telephone

Email:



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Date

Dear _____

I am a Master of Special Education (MSPed) student at Waikato University, and a teacher with 14 years experience in primary teaching. Currently, I am completing my thesis in special education, with a focus on gifted and talented students.

My interest in special education has led me to consider the possibility of using Individualised Education Plans (IEPs) as a means of personalising learning for young, gifted and talented readers. An IEP is a programme designed for an individual student that allows that student's specific needs to be met. An IEP can provide a focused way for the student, parents/caregivers, teachers and in some instances, other agencies to plan, deliver and assess the student's needs and progress over time.

This research will be collaborative in nature, that is, I seek to work alongside teachers throughout the research project. It is hoped this participatory process will present teachers with an opportunity to explore components and process of the differentiation process, as well as offering students the opportunity to become active participants in their own learning. I wish to invite you to become a participant in this research project.

The research process would involve:

- Meeting with junior school teachers outlining the nature of the research and inviting four interested teachers to take part.
- Keeping reflective journals.

- Three scheduled focus group meetings at weeks one, three and 10 of the research project, to be conducted outside class hours.
- Two 30 – 40 minute classroom observations with each teacher, in weeks two and nine of the research project
- One 50 minute individual audio-taped interview, at week nine, to be conducted outside class hours
- Two IEP meetings, one at the commencement and one at the conclusion of the IEP implementation period

The school, teachers, parents and students will not be identified in this research, and pseudonyms will be used in all transcribed materials and the final written thesis. Participation is completely voluntary, and participants may withdraw at any time up to the point of data analysis. Finally, please do not hesitate to contact me if you have any questions or concerns or you require further information. Alternatively, my supervisor, Dr Roger Moltzen, may be contacted at the School of Education, Waikato University, via email: rim@waikato.ac.nz.

If you agree to participate in this research project, could you please complete the attached consent form and return in the enclosed stamped, addressed envelope provided.

Thank you for your consideration of this matter.

Yours sincerely

Laurie Mazza-Davies

Appendix D: Teacher Consent Form

I _____ (name of teacher) have read and understood the nature of the research project and agree to participate as a co-researcher in this project. I agree with the following statements (please tick):

I understand that my participation is voluntary, and that I can withdraw at any time up to the point of data analysis.

I understand that the identity of our school, the teachers, parents and students participating in the research will be kept anonymous, and any information provided will be kept confidential.

I understand that any documentation resulting from this project, such as the IEPs, observation notes and any audio-taped and transcribed material will be held by the researcher, in a secure location.

I understand the findings of this research will primarily be used towards the completion of a four paper thesis as partial fulfillment of the requirements for a Master of Special Education degree. Seminars, presentations, conference papers and journal articles may eventuate from the findings of this study.

I understand that this research project is being supervised by Dr Roger Moltzen, School of Education, Waikato University, and if I have any concerns, I may contact him via email: rim@waikato.ac.nz

Signed _____ Date _____

Appendix E: Letter to Parent/Caregiver and Child Participant

**Department of Human
Development and Counselling**

The University of Waikato
Private Bag 3105
Hamilton, New Zealand

Laurie Mazza-Davies

Telephone

Email:



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Date

Dear _____

I am a Master of Special Education (MSPed) student at Waikato University, and a teacher with 14 years experience in primary teaching. Currently, I am completing my thesis in special education, with a focus on gifted and talented students.

My interest in special education has led me to consider the possibility of using Individualised Education Plans (IEPs) as a means of personalising learning for young, gifted and talented readers. An IEP is a programme designed for an individual student that allows that student's specific needs to be met. An IEP can provide a focused way for the student, parents/caregivers, teachers and in some instances, other agencies to plan, deliver and assess the student's needs and progress over time.

This research will be collaborative in nature, that is, I seek to work alongside teachers throughout the research project. It is hoped this participatory process will present teachers with an opportunity to explore components and process of the differentiation process, as well as offering students the opportunity to become active participants in their own learning.

Your child has been identified by his/her classroom teacher as a student of high ability in reading, who may benefit from an Individualized Education Plan in this area. The Individualised Education Plan would be for approximately 10 weeks, and could involve:

- Your child being observed (in a non-obtrusive manner) in class for 30 – 40 minutes, twice in a 10 week period.
- Your child participating in at least part of two IEP meetings, being an active participant in the goal setting process of this meeting. (As parents, you will be invited to attend this meeting, also).

The school, teachers, parents and students will not be identified in this research, and pseudonyms will be used in all transcribed materials and the final written thesis. Participation is completely voluntary, and participants may withdraw at any time up to the point of data analysis.

Attached to this letter is a Parent/Caregiver and Child Participant consent form for you to complete and sign. Please note you are asked to explain to your child the nature of this research and their role in this project. There is a separate consent box for your child to tick, and a space for their signature.

Finally, please do not hesitate to contact me if you have any questions or concerns or you require further information. Alternatively, my supervisor, Dr Roger Moltzen, may be contacted at the School of Education, Waikato University, via email: rim@waikato.ac.nz.

If you agree to your child participating in this research project, could you please complete the attached consent form and return in the enclosed stamped, addressed envelope provided.

Thank you for your consideration of this matter.

Yours sincerely

Laurie Mazza-Davies

Appendix F: Parent/Caregiver and Child Participant Consent Form

I _____ (name of parent/caregiver) have read and understood the nature of the research project and agree to my child _____ (name of child) participating in this project. I agree with the following statements (please tick):

I understand that my child's participation is voluntary, and that they can withdraw at any time up to the point of data analysis.

I understand that the identity of our school, the teachers, parents and students participating in the research will be kept anonymous, and any information provided will be kept confidential.

I understand that any documentation resulting from this project, such as the IEPs, observation notes and any audio-taped and transcribed material will be held by the researcher, in a secure location.

I understand the findings of this research will primarily be used towards the completion of a four paper thesis as partial fulfillment of the requirements for a Master of Special Education degree. Seminars, presentations, conference papers and journal articles may eventuate from the findings of this study.

I have explained the nature of this research to my child, and he/she fully understands their role in this project, and is a willing participant.

I understand that this research project is being supervised by Dr Roger Moltzen, School of Education, Waikato University, and if I have any concerns, I may contact him via email: rim@waikato.ac.nz

Signed _____ (name of parent/caregiver)

Date _____

Parent/Caregiver and Child Participant Consent Form (continued)

I _____ (name of child participant) agree to take part in this project.

My parent/caregiver has explained this project to me, and I fully understand my part in this project.

Signed _____ (name of child participant)

Date _____

Appendix G: Semi Structured Interview Questions

Initial Perceptions

1. Thinking back to the very beginning of the project, what were your initial reactions to the research study?
2. You had not undertaken any professional development in gifted education prior to this project. How did you feel about this going into this study? How do you feel about this now?
3. Prior to this project, you had little experience with IEPs. How did you feel about this going into the study? How do you feel about this now?
4. Did you have any expectations concerning the outcome of the research? That is, did you consider what participation in the study might mean for the student involved, the parents or for yourself as a teacher?
5. What were your understandings of ‘differentiated learning’?
6. What was your understanding of the Ministry’s *personalising learning* initiative?

Relationships

1. Did this research study affect in any way your relationships with your colleagues; class; child participant; parents of child participants; principal or others?
2. If so, in what way were the relationships affected?

Challenges

1. Did you find any aspects of this research project challenging for you personally? If so, what were they?
2. Do you perceive any aspects of this research to have challenged _____ (child participant)? If so, in what way?

The IEP

1. Is the IEP an effective tool in assisting teachers towards differentiating reading programmes for young, gifted readers?
2. If so, what particular features of the IEP prove beneficial in assisting teachers towards differentiation of reading programmes for young, gifted readers?
3. Regarding the implementation of the IEP, did you encounter any difficulties?

4. What are the short comings in the use of the IEP towards the differentiation of reading programmes for young, gifted readers?
5. What are your perceptions of what the IEP process has meant for _____ (child participant)?
6. In your opinion, could the IEP process work for other curriculum areas? If so, what are they, or is there a special case for using the IEP for reading?
7. Given your current understanding of the Ministry's personalising learning initiative, how well do the processes associated with the IEP align with these initiatives?

Strategies for differentiation

1. In thinking about the different strategies/approaches we have discussed (and you may have used during the study), are there any in particular you have found helpful towards differentiating the reading programme for young, gifted and talented readers? Why were these helpful?
2. Are there any you found difficult or problematic to implement? Why?
3. Are there any you feel uncertain about, and would like to explore in future?
4. In thinking about the use of other personnel in this study (Bev, and Gail) was this helpful (or otherwise) and to what degree?

Epiphanies or 'ah-ha' moments

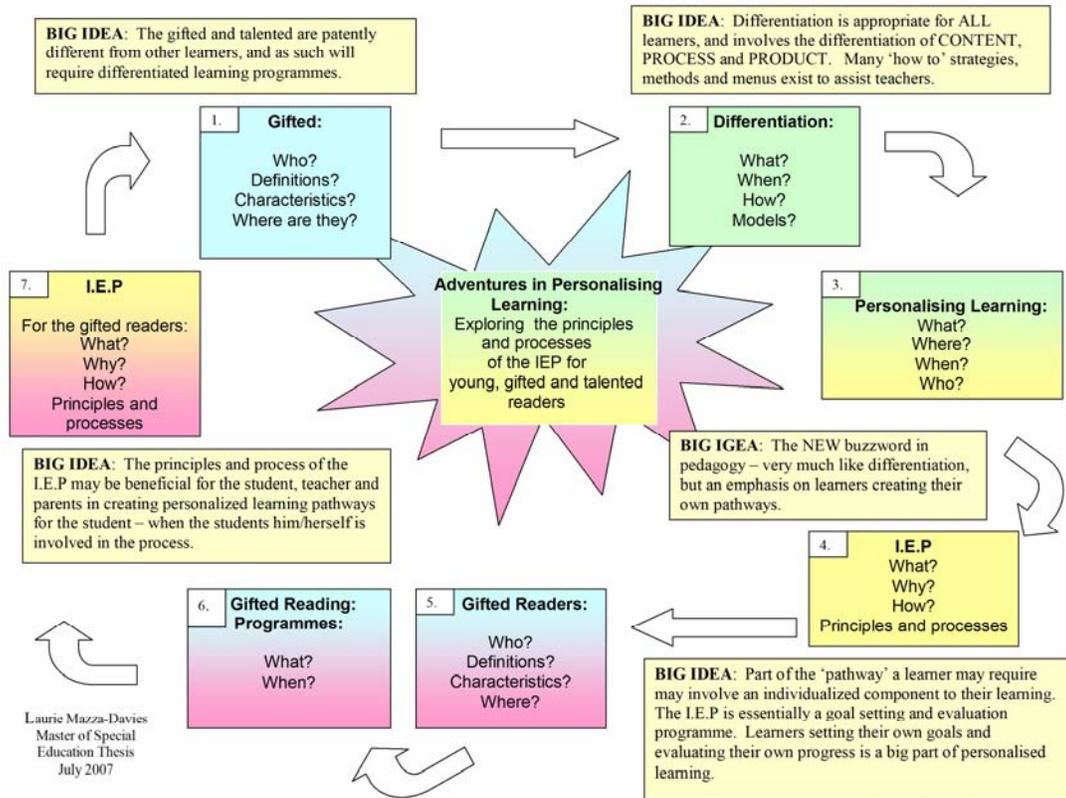
Epiphanies can be described as turning point experiences or illuminative moments which result in significant changes to people's perceptions of their lives.

1. Did you experience any 'moments of significance' during this study? If so, what are the most significant experiences for you in relation to this research project?
2. Has this research project altered in any way your own personal teaching philosophy? If so, how?
3. Has this research project altered the way you see gifted and talented readers in your class?
4. As a result of this research project, will you alter your teaching practices for young, gifted and talented readers in your class? If so, how?

Other

1. Is there anything at all you wish to comment on regarding the project which may not have been covered by any of the above questions?

Appendix H: Research Concept Map



Appendix I: Individualised Education Programme Format

INDIVIDUAL EDUCATION PROGRAMME (IEP)				
NAME:		DATE OF BIRTH:		SCHOOL:
PERSONNEL:			DATE IEP WRITTEN:	
			REVIEW DATE:	
OVERVIEW:				
NEEDS	CURRENT PERFORMANCE	LEARNING GOALS	STRATEGIES RESOURCES	EVALUATION CRITERIA

Cathcart (2005)