A Tall Poppy in a Small Field

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Abstract

Few studies have examined the lived experiences of profoundly gifted students in mainstream school contexts. A consensus exists in the research literature (Clarke, 2009; Delisle 2012; Renzulli, 2005) that special classes or special schools are the most effective provision for profoundly gifted students rather than provisions in mainstream schools. The reality in Australian schools is that profoundly gifted students have limited opportunities to access special schools or special classes or to establish connections with like-minded peers in mainstream schooling.

This research addresses a gap in Australian research by exploring the educational experiences and perceptions of a profoundly gifted student in terms of the student's academic, social, and emotional development while in a mainstream schooling context. This study presents the perspective of one profoundly gifted student with supporting narratives from her parents, two siblings and seven teachers from an independent co-educational school and a government primary school. Participants were involved in four personal interview sessions over a six-month period, which took place in the family home of the main participant and in the two school environs where the profoundly gifted student completed her education.

Data were collected through interviews where participants responded to open-ended questions. This was triangulated with additional data from school documents including journals and school reports. A 'narrative analysis' of the data was adopted using narrative representation to unify all of the data (Clandinin & Huber, 2006) and then represent the findings through stories.

The stories provide a window to understanding the lived experiences of a profoundly gifted student in mainstream schooling. The student cited feeling and being different coupled with social awkwardness, perfectionism with intense competitiveness and the conflict of prescribed learning with successful provisions. These provisions included radical acceleration, mentorship and autonomy with individualised programs.

The findings indicate that a profoundly gifted student can be successfully educated in mainstream schools, but only in the presence of strong advocates and mentors to facilitate provisions appropriate to her abilities. A further finding of this research is the disparity between academic provisions and affective provisions in primary and secondary school contexts. Whilst this need may have been more naturally met at home, at school the profoundly gifted student's social and emotional well-being was largely her responsibility.

The study has found that teachers had varying experiences working with this profoundly gifted student. Teachers highlighted the impact of their low self-efficacy for teaching profoundly gifted students on their instructional practice, their feelings of inadequacy about meeting the needs of such a profoundly gifted student, and their lack of knowledge and understanding of profoundly gifted students due to limited opportunities for professional development in gifted education. The teachers who indicated having success teaching the profoundly gifted student gave her freedom and encouragement to extend her learning based on her skills and interests at a complexity and pace that she determined.

This study has implications for schools because they are responsible for promoting the effective academic, social and emotional development of all students including those with diverse needs such as the profoundly gifted. The degree to which mainstream schools can achieve and maintain this for profoundly gifted students has not been determined.

This study has implications for parents of profoundly gifted students, who are shown to be valued advocates and resources. Their partnership with educators is paramount because they understand their child and can contribute to teachers being able to meet the child's needs while in the education system.

DECLARATION

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed:

Kylie Suzanne Booker

Date: 21 October 2018

Acknowledgements

I have often compared my pursuit of a doctorate to climbing a high mountain. Roberts (2010) described The Dissertation Journey by saying, “It is a long and arduous trek—not for the fainthearted… However, it also offers incomparable opportunities for personal and professional growth… Completing a dissertation changes your life” (Roberts, 2010).

A dissertation requires the ability to plan, conduct, write, and defend an original research study. In the end, the personal journey in learning and growth, results in an extraordinary feeling of accomplishment and contribution (Roberts, 2010).

My journey to complete the dissertation was often a challenging and difficult climb, but it is who I have become as a result of the experience that is most important. It took me eight years to complete. There were many peaks and valleys that contributed to the hard, often time-consuming work. There were many lonely times when I felt the overbearing weight of this dissertation on my shoulders with no end in sight.

I completed this journey whilst I worked full-time in a senior school leadership position, welcomed twins into our family, juggled a teenager through his HSC, lost my number one supporter; my Dad, and attempted to fulfil the requirements of the Doctorate. My personal goal to complete the dissertation took an unexpected amount of self-discipline, and I am grateful for people around me. I have learned from their expertise and knowledge. I am indebted to their constant guidance, support, and assistance to finish the climb and complete the Doctoral dissertation. There is immense satisfaction when you reach a lifelong goal and with a completed dissertation, I am willing to take a moment to soak in the view from the top.

I would like to express my sincere gratitude to my thesis supervisors Dr Penny Van Deur and Professor Heather Smigiel who went beyond the supervisory role being the most encouraging, caring, and knowledgeable mentors for this long and difficult journey. You have guided me through every step of this process, constantly reminding me that I

was never out of my element, but finally in it. I know at times you doubted my ability to finish but I thank you for allowing me to continue.

Last but never least, I would like to thank my family for not only putting up with me through my many decades of consecutive education, but supporting my mantra to learn each day, and for always encouraging me to be me.

To Susie: what makes us so special is our unconditional respect for, and support of, each other's dreams; I am eternally grateful for your love and unending support of my journey.

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To my children: Mitchell, you are the reason I started this journey, you have challenged me in ways I never thought possible, you have made me so proud and my only hope is that you find the pathway that makes you happy and contented. To Jarrah and Ruby, our shining lights, I hope you always continue to love learning and aspire to be the best you can be.

Finally, to Angela Barnes, my guiding light through the turmoil of thesis writing, thank you for your endless editorial support, encouragement, tough love and direction.

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Prologue

We often make promises to ourselves to change the experiences of others based on what we have experienced in our own lives. I never aspired to be a teacher; in fact, I had no idea what I wanted to do in my future. A freak accident on a school trip in the final few months before my Year 12 exams meant I no longer had the choices I once had, but this ultimately opened up a greater possibility.

The strong influence of key teachers, in particular Ms. Sally Attrill, led me to teaching, and I soon realised I had the most important career in the world, with the ability to make a difference. This career has taken many directions but with the birth of my first child and the subsequent start of his formal schooling, I was thrown head first into the world of acceleration, withdrawal, special programs and my own conflict between parent and educator.

MB was a highly sensitive, bright young boy. He attended a private boys' school and started his first formal year of schooling at four following a recommendation from the school's early learning centre. He attended a withdrawal program once a week for enrichment/extension activities.

In September of 2001, we were holidaying in New York and on our arrival home we heard of the tragic news of 9/11, the Twin Towers we had visited only days before. MB's teacher contacted me and recounted an incident that had occurred between him and some of his peers. The boys every morning were privileged with ten minutes of free building and construction time on the mat. They were building huge towers and knocking them over with the planes they had built. These boys were only five and were role-playing what they had seen in the media. On this occasion, MB stood up and screamed at the boys calling them insensitive and disrespectful. He stood sobbing, frustrated that they could not understand the issue. The teacher described this as a defining moment for him, and yet whilst he had friends he was disconnected in his thoughts and development. It was following this, that the school requested he

participate in a psychological assessment with the school psychologist. I was apprehensive but agreed. He completed the assessment and was identified as highly gifted.

I was determined to read every research paper and article to better understand gifted education and how schools and parents support high ability students. I proceeded to take additional Postgraduate studies in Gifted Education and my career followed this path for many years; presenting globally on effective gifted programming in schools, representing Australia as a delegate to the World Council for Gifted Children, developing and teaching specialist programs in gifted education as well as lecturing in gifted education modules for the Masters Course at Flinders University. My life as a result was enriched with the opportunity to work with some inspirational colleagues and students who ultimately shaped the way I view curriculum and leadership in schools.

Throughout many years of teaching gifted students, I spent time reflecting on best practice and advocating for programs for gifted students in schools. It was during these years that I was fortunate to work with an exceptional young student, Ruby, who challenged me in every respect to view mainstream schooling differently and challenge the conventional notions of timetabling and year level placement.

My son MB finished school successfully (albeit with some challenges) and went on to study Engineering and now Medical Science. I believe with an early gifted identification often comes expectations, not only from parents but also from others who cross students' paths, and MB found the conflict of expectation and performance challenging. As a result, I had first-hand experience with underachievement, high achievement, acceleration and everything in-between. It is apt, that on the day of completing this paper MB celebrated his twenty-third birthday.

My vision as a teacher and leader is to ensure appropriate provisions and programming for gifted students in schools. I passionately believe in students having a voice and choice in their educational pathway. I acknowledge this passion was a motivation for this study.

Chapter 1

Introduction

1.1 Introduction

> *Real learning gets to the heart of what it means to be a human. Through learning we create ourselves. Through learning we perceive the world and our relationship to it… extending our capacity to create, to be part of the generative process of life. There is within us a deep hunger for this type of learning. (Senge, 1990, p.14)*

Yet in schooling, what is real learning? Is it teaching that has been appropriately adapted to cater for the specific needs and level of the individual learner? This question is relevant to this study because the academic and emotional needs of a profoundly gifted learner vary greatly from the average cohort as well as from one another.

To be *gifted* is generally understood as having exceptional talent or natural ability, or potential (Clark, 2013; Feldhusen & Moon 1992; Gagné, 1985; Nugent, 2005; Renzulli, 1978, 2002). To be profoundly gifted, however, to shine, to stand out above the rest, to be a 'tall poppy', albeit in a small field, introduces a different set of challenges. The levels of giftedness and talent and associated definitions have a history of different, and often conflicting, conceptualisations (McBee, McCoach, Peters, & Matthews, 2012).
Thus, the use of general intelligence as the decisive characteristic underlying the definition of giftedness has prevailed in giftedness research (Baudson & Preckel, 2013; Rost, 2013; Roznowski et al., 2000; Wirthwein & Rost, 2011). For the purposes of this research a profoundly or extremely gifted student is considered to have an intelligent quotient of 160+ (Gagné, 2004; Gross, 1989; Makel et al., 2016; Sattler & Dumont, 2004).

Whether as a child or adult, most of us can relate to the pressures of an educational setting, the dynamics of classroom relationships between peers, the personal

responsibility of learning and subsequent pressure of achievement. The often inevitable experience of being called upon or questioned as a student, sometimes brings with it the uncertainty and pressure of being equipped with correct knowledge. Insecurity and embarrassment may arise, and one can become the unwanted focus of other people's judgment, evoking feelings of inferiority. Whilst such isolation is real, what of the student who *does* know all the answers? Does this naturally put them in a state of superiority in competitive terms, or in contrast - further isolation and, ironically, inferiority due to not fitting in with the 'norm'?

This study spans the period from the commencement of the main participant's formal mainstream schooling at the age of five, until her Year 12 graduation in 2009 at the age of seventeen. For the purpose of this study the student is being referred to as 'Ruby', her alias. As the researcher, I acknowledge my personal background and experience in gifted education affects my 'relationship, identifications, and exchanges' (Luttrell, 2000, p. 500) with the main participant in this study.

This study presents the story of one profoundly gifted student to provide educators with a unique insight into the cognitive characteristics and social/emotional challenges of a profoundly gifted student, while also highlighting effective or ineffective educational provisions in mainstream South Australian classrooms. I acknowledge that a thesis has limited readership and with Ruby's consent I will endeavour to publish her story for wider distribution at a later time.

A single narrative case study is used here as a 'lens' or way of exploring the intricacies and complexities of a profoundly gifted student in a mainstream school context. Sfard and Prusak (2005) discussed the importance of stories for understanding lives and stated that all people construct narratives as a process of constructing and deconstructing identity. This study involves Ruby telling her own stories in her own words with a timeline created by her that represents key moments in her journey throughout her education. This timeline also forms the basis for collecting stories from Ruby and her teachers and family. The timeline throughout the study is dynamic as additional events could be raised as being significant in the study. These stories form

the primary data. Secondary data also incorporated photos, videos and diary entries from various points in Ruby's education.

I present the results of interviews with key teachers and administrators at two of the schools Ruby attended in the western suburbs of Adelaide. One of these schools is a State Government school, the other an Independent school.

A narrative enquiry of data using narrative representation has been used to unify all of the collected stories (Clandinin & Huber, 2006) and then retold into a story. In analysing the data and through re-telling, my aim was to formulate answers to the research questions posed (Clandinin, 2007, p15) and therefore provide ideas and suggestions for students in a similar position to Ruby, as well as educators who may be privileged to teach and mentor profoundly gifted students. Moreover, through individual narratives, the study aimed to hear the telling and retelling of stories of past experiences, in order to shape stories for the present and future (Beattie, 1995). In this case, the stories could illuminate effective school-wide provisions that could be made for profoundly gifted secondary school students in particular.

Bach (2007) noted that individual experience was the central lens for understanding a person and that experiences are continuous with one leading to another. Bach concluded that integrated curriculum, ongoing evaluation, and parental involvement are the key to successful integration of highly/profoundly gifted students because these factors foster both the cognitive and affective development of the student.

There is considerable research on the *traits* of profoundly gifted students (Webb, Gore, Amend & DeVries, 2007), and whilst the traits of the participant will be acknowledged and discussed, it is not the aim of this research to determine traits of profoundly gifted students. The aim of this research is to present the experiences and perceptions of one profoundly gifted student related to academic, social, and emotional considerations in mainstream schooling.

This narrative details the participant's schooling experiences in-depth over a period of more than ten years. Malterud et al. (2016) noted the amount and quality of information

the participants held, not participant numbers contribute to new knowledge from the analysis. Some recommendations can be made about the implementation of school-wide provisions and policy specifically for exceptionally and profoundly gifted students, as this study is based on a substantial amount of information over an extended period.

This research adds to the literature on profoundly gifted students by raising awareness of the broad and varied needs which potentially exist for them. The study may not be deemed to contribute to the deeper understanding of complexities gifted students face collectively, it provides an opportunity for one profoundly gifted student Ruby, to reflect and contribute to a greater understanding of her situation based on the complexity of a simple narrative. Most importantly in having Ruby tell her story, it was hoped that she would feel listened to, and that knowledge gained through her narrative may provide valuable insights into supporting effective academic and affective provisions for profoundly gifted students.

A review of the psychological literature revealed limited qualitative narrative research conducted with profoundly gifted students. Schultz (2009) was able to reference less than one hundred highly/profoundly gifted individuals in the scholarly literature up until 2013, and noted that current literature forming the knowledge base about profoundly gifted students has concentrated more on tendencies and behaviours rather than educational provisions and school experiences.

1.2 Background Information on Ruby

Ruby was born in Adelaide, the first of three children to well-educated second-generation Australian parents; her mother a well-respected music teacher in a State Government primary school and her father, an accountant. She commenced formal schooling at the age of five in a State Government school, full of energy and excitement like most children her age. Ruby completed the WISC-III (Kaufman & Lichtenberger, 1998) at the age of 7 and hit the ceiling of the instrument with a perfect score and an intelligence quotient of 160+. The assessment was conducted through the Department of Child Services in South Australia and at the time her parents were advised to have

follow up testing using the Stanford-Binet L-M (Kaufman & Lichtenberger, 1998) which does not have the ceiling of the WISC-III and presents a more accurate intelligence quotient weighted slightly more towards verbal skills. Her parents said **(Interview July 2016)** that they declined further testing as they felt they had sufficient information from the previous assessment and the costs were considerable at that time. The assessment did, however, confirm Ruby was profoundly gifted. Having hit the ceiling at 160+ in the WISC-III and demonstrating that she had achieved scores equal or above the 99.9th percentile on a number of standardised intellectual, academic, or achievement tests she was considered profoundly gifted by Sattler and Dumont (2004) definition although Gross (2004) considered profoundly gifted to be at 180+ intelligence quotient.

1.3 Vignette from Ruby

As a 23-year-old reflecting on my formal schooling I use the analogy of a rollercoaster where I continually battled to balance at the very top, feeling all alone but often having peers sitting right next to me, hanging on to the edge of expectations of family and school with only one way to go, with little or no opportunity to climb higher but fall to what was expected of the natural course. There were many highs and lows, but the track was not often built for my car or for me!

1.4 Significance of the study

Every individual has the right to education and to be a productive member of society (United Nations Declaration of Human Rights, 1952).

While efforts tend to focus on children with learning difficulties and special needs it seems that gifted students are taken for granted. Are gifted students not a unique asset who therefore need to be uniquely recognised and nurtured in order to be innovators and leaders in their field? If so, then it is important that all students, including gifted students, are afforded an education appropriate to their needs.

A student's experience in school can inform policy and practice because a single case understood can yield as much insight as statistical knowledge of millions (Roncalli,

1997, p180). Having Ruby tell her story has the potential to provide a unique insight into issues faced by other profoundly gifted students, and from these insights knowledge can be shared for the benefit of others.

As this study is within an educational context, I am discussing the implications of the findings for future practice in mainstream schooling for profoundly gifted students. I recognise the limitation of the readership and propose that in order to communicate the findings broadly, it would be relevant to publish the findings so they can be read by educators at the World Council of Gifted and Talented Children, and the Asia Pacific Federation on Giftedness conferences, in educational journals and possibly in a book.

1.5 The Overarching Question

How does a profoundly gifted student reflect on and understand her experiences of mainstream schooling related to academic, social and emotional considerations at various stages from Year 1 to Year 12 and how does she describe her experience of school-wide provisions and strategies?

The Sub Questions

1. How does a profoundly gifted student reflect on and understand the social and emotional impact of her giftedness in the contexts of school, family and relationships?
2. How do educators reflect on the experience of educating a profoundly gifted student?
3. How does the family of a profoundly gifted student including her siblings, perceive the student's schooling experiences?

1.6 Operational Definitions of Key Terms

Definitions of 'Profoundly Gifted' students and '**Giftedness**' are discussed in the Literature Review. For the purposes of this research, the following terms are used:

Asynchronous Development

Asynchronous development refers to an uneven intellectual, physical, and emotional development (Bainbridge, 2018).

Narrative Inquiry

Narrative inquiry is a discipline within narrative research that uses field texts, such as stories, journals, field notes, conversations, interviews, family stories, photos, and life experience, as the units of analysis to research and understand the way people create meaning in their lives in the form of narratives. It is the process of gathering information for the purpose of research through storytelling. Chataika (2005, p.2) continues that, "In principle it is the form of inquiry that is committed to representing the actions of the relatively unknown, perhaps oppressed and ignored social groups".

Intelligence Quotient

Intelligence Quotient is a measure of the intelligence of an individual derived from results obtained from specially designed tests. The IQ Score is obtained by dividing an individual's mental age by his or her chronological age and multiplying the result by 100 to obtain the IQ score traditionally derived by the quotient (Collins English Dictionary, 2018).

Enrichment

Enrichment refers to the extended, in-depth, deepened and/or broadened programming offered to above average ability students, and refers to an instructional accommodation

in this study. Enrichment is typically beyond the depth and breadth of what is offered in the regular classroom (Clark & Zimmerman, 1998; Saranli, 2017).

Affective

Affective concerns refer to a person's feelings and attitudes about learning. It has been used in this study as a domain of development that addressed the profoundly gifted student's emotions toward learning experiences (Clark, 2013). The affective domain includes social and peer relations, social-emotional development, and individual self-concept with respect to identifying one's feelings of interest and unique talents.

Chapter 2

Literature Review

2.1 Introduction

The main purpose of this section is to discuss the literature related to this research on profoundly gifted students. As there exist a limited number of studies on this topic, some studies more than three decades' old have been included with more recent studies to account for recent developments.

The research literature on the profoundly gifted student's voice in relation to teaching and learning is rare (Gallagher, Harradine & Coleman, 1997). It is important to hear the voice of a profoundly gifted student because it has "transformative potential" to enhance students' own learning and school improvement through 'essential first hand evidence' (Flutter & Ruddock, 2004, p5.) that educators can use to modify school structures.

This research addresses the gap in the literature by providing an opportunity for a profoundly gifted student's voice, and those of her teachers and family to be heard in relation to mainstream schooling, her experience of school-wide provisions and

strategies and the social and emotional impact of her profound giftedness on her contexts (school family and relationships).

Coleman et al. (2007) noted that a relatively small number of people who are gifted have been studied and much of the research is from the outsider perspective. This research addresses a gap by providing the insider perspective not only of the profoundly gifted student but that of her teachers and family. The combination of these varying perspectives as well as discussion of school-wide provisions and strategies, is still a relatively untouched area of inquiry.

Whilst the literature on profoundly gifted students heavily references special classes or special schools rather than provisions in regular schools (Clark, 2009; Gross, 2006) the reality in Australian schools is that profoundly gifted students have limited opportunities to access special schools or to establish connections with likeminded peers in mainstream schooling. In this research, the situation is presented of a profoundly gifted student being educated in a mainstream schooling context and her views about this experience and that of her family and teachers. Terman (1925) and Hollingworth (1942) argued that schools needed to provide deliberate, structured opportunities to meet and interact with other profoundly gifted students if they are to experience successful mainstream schooling. Farrelly (2017) indicated the incidence of profoundly gifted students with nonverbal and verbal giftedness is 1 in 100,000.

2.2 Overview of Existing Research

The psychological literature presents various definitions and perspectives of profoundly gifted students, and school-wide provisions and strategies related to academic, social and emotional considerations for profoundly gifted students in mainstream school settings.

There are four major sources of longitudinal information that form the base of what is understood about profoundly gifted students. These include: a) Lewis Terman's longitudinal study on giftedness (1925) ; b) Leta Hollingworth's work in the United States with primary school children (1942) ; c) Miraca Gross's study of fifteen Australian

adolescent school students (1993, 2004); and most recently d) Makel et al.'s (2016) study of educational, occupational, and creative accomplishments of the profoundly gifted. These studies all concluded that highly/profoundly gifted children were prone to develop social and emotional adjustment issues and that the major characteristics of gifted youth were precocity and the ability to learn faster than children of low and average ability. Gross (2004) followed 15 profoundly gifted students in a longitudinal study and provided the opportunity for parent and student voice although the researcher and parent voices were most evident. There appeared to be no evidence of teacher voice in this study. These studies were comprehensive in recognising the characteristics of profoundly gifted students that include: exceptional speed in processing information, extraordinary vulnerability (intellectual, social, emotional problems), exaggerated emotional responses, unusual depth of feeling and intense need for others to listen, support and nurture. Further research was needed to address the gap in student and educator voice.

Schultz (2009) discussed the misconception perpetuated by educators who often assume the gifted are a relatively homogeneous group and argued that this assumption leads to educational provisions that are often simplistic and inappropriate for profoundly gifted students. Schultz also noted the inability of educators to identify and address the needs of highly/profoundly gifted students, which often left the students frustrated, anxious, and 'functionally disabled' in the classroom (p.28). More recently, Harrington (2014) referred to parenting and educational provisions for profoundly gifted students, and concluded that they often require more depth in the content, process and product of their learning beyond which anyone in mainstream schooling is generally equipped to handle. Simply put, the more a gifted child's abilities differ from the norm, the more inappropriate becomes the educational program offered in the regular classroom because of the difficulty involved in matching school programs to the needs of profoundly gifted students. Clarke (2009) noted that while school settings give limited priority to differentiating learning experiences for gifted students, far less priority is given to appropriate learning experiences for profoundly gifted students. She stated that 'moderately gifted children waste nearly half of their time in a regular classroom and profoundly gifted children waste almost all of their time' (p. 13).

Other researchers have described the preternatural tendencies and behaviours of profoundly gifted children in terms of their greater risk for emotional and social problems, particularly during adolescence and adulthood (Neihart, 2011). Researchers share the belief that the profoundly gifted are more sensitive to interpersonal conflicts and experience greater degrees of alienation and stress than do their peers due to their cognitive capacities (Barbe, 1964; Benbow, 2016; DeHaan & Havighurst, 1961; Flack, 1983; Janos, 1983; Terman & Fenton, 1921). This could mean that profoundly gifted students are isolated in the classroom and are perceived as particularly difficult or challenging in regular classrooms.

2.3 Giftedness and the Profoundly Gifted

What is giftedness? Defining the terms 'gifted' and 'giftedness' is a problematic and complex issue. There is limited consensus on a definition for giftedness with varying definitions focusing on abilities, the potential for abilities, teacher recommendations, different cultures and parent reports (Coleman, 2004; Leavitt, 2009). Among the many definitions there is a general consensus that the gifted, like all individuals, have specific academic (Gross, 2006), social and emotional needs (Assouline et al., 2006) that must be met to ensure appropriate, optimal functioning. This holds true for both gifted and profoundly gifted populations.

For the purpose of this research profoundly gifted students are defined as those students scoring four standard deviations above the norm on a standardised intellectual, academic, or achievement test (Schultz, 2009, p. 27). Educational psychologists typically define gifted students as scoring two standard deviations above the norm (IQ 130) on a standardised intellectual, academic, or achievement test (Boazmen & Sayler, 2011). These tests include the Wechsler Intelligence Scale for Children – Fifth Edition (WISC-V), the Wechsler Individual Achievement Test – Third Edition (WIAT-III), and the Differential Ability Scales-II (DAS-II). Highly gifted students are deemed to score three standard deviations above the norm and profoundly gifted students four standard deviations above the norm (Schultz, 2009). DeLaJara (2007) illustrates the four

standard deviations above the norm indicating intelligent quotient score of 160+ and percentile of 99.997 (See Figure 1).

Wasserman (2003) described profoundly gifted students as those whose score is at or above the 99.9th percentile on a standardised intellectual, academic, or achievement test, although Lubinski et al. (2001) argued for even stricter criteria of 99.99th percentile. Ruby's scores in standardised intellectual, academic, or achievement tests both at primary and secondary schools confirmed she was in the 99.99th percentile across non- verbal and verbal domains. These tests included the Australian Council of Educational Research (ACER) Scholarship Test and the High Ability Selection Test (HAST).

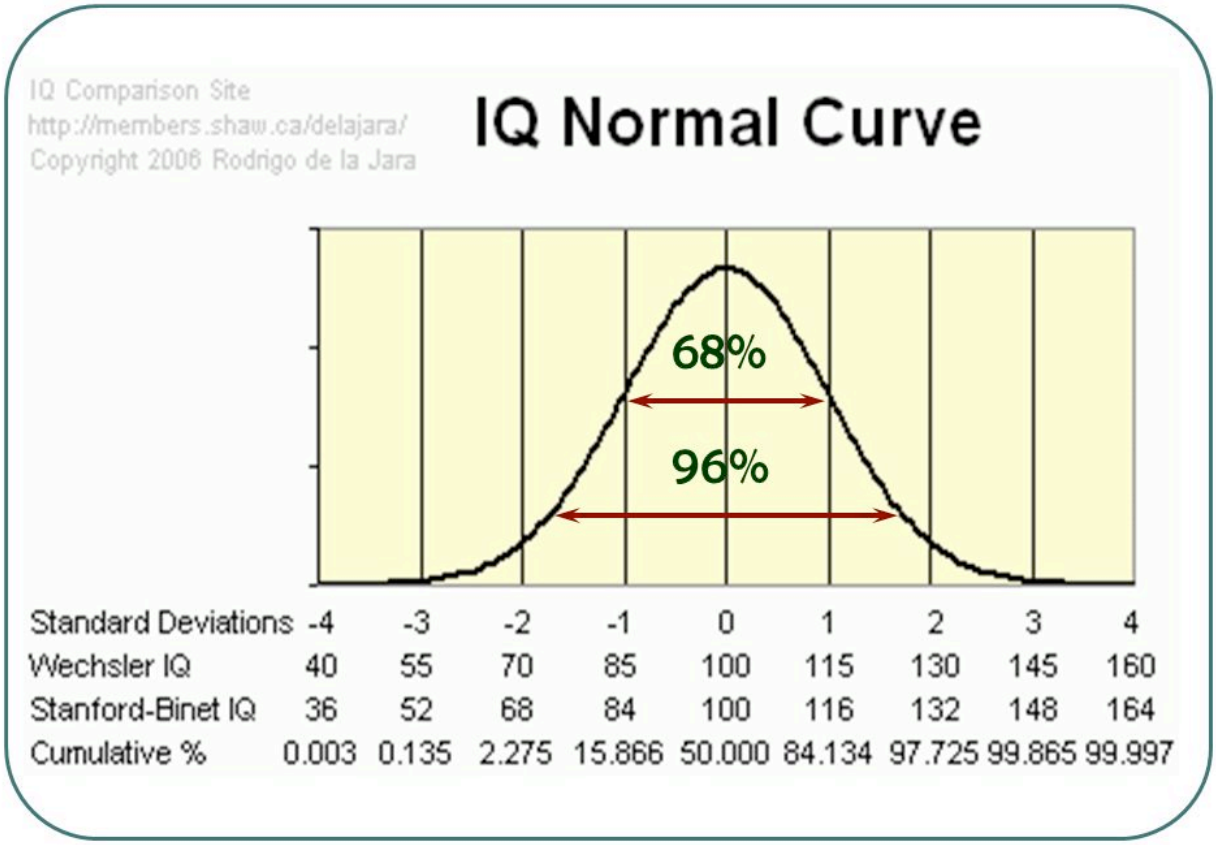

Figure 1. IQ Normal Curve and the relationship between the gifted and profoundly gifted. Reprinted from IQ comparison site, R. DeLaJara, 2007, Retrieved from https://www.iqcomparisonsite.com.

Over recent decades, the accepted definitions of giftedness have evolved to include a multidimensional concept, replacing the previously dominating, one-dimensional model of giftedness focusing solely on an intelligence quotient (IQ) measurement and including environmental and chance factors (Leavitt, 2009). Gross (2000) noted, the intelligence quotient is a useful index for comparing mental age with chronological age, and that it can assist in understanding the fundamental differences in mental processes between moderately gifted and profoundly gifted students. Gross (2004) described profoundly gifted students as unique individuals with varied and multifaceted traits. She also noted certain characteristics associated with these students including but not limited to them having an extreme need for constant mental stimulation, the ability to rapidly learn and process complex information, having insatiable curiosity, possessing the ability to focus intently on a subject of interest and significant affective, social and emotional differences including asynchronous development.

Gross (2000) stated:

> *Exceptionally and profoundly gifted children are children whose capacity to learn is significantly advanced even beyond the average for the intellectually gifted. In the name of both excellence and equity, a profoundly gifted student's journey through school is often more uncertain than wondrous due to the myths and misconceptions that abound. Ignorance, misinterpretation of research, prejudice, politics and the perpetuation of stereotypical imagery all play their part. (p. 6)*

In this definition Gross highlights the difficult and uncertain journey that profoundly gifted students experience due to misinterpretations and misunderstandings by educators. In 1993, Miraca Gross identified a significant difference between gifts and talents and noted that gifts have to relate to the inherent ability to perform highly in a range of areas, which include intellectual, creative, socio-emotional and sensorimotor, whereas talents apply to actual high-level performance. According to Gross, unless an effectual mix of catalysts is in place, including environment, personality and motivation, gifts will remain unrealised potential.

When discussing profoundly gifted students Gross (2000) stated that “Children of IQ 170+ appear in the population at a ratio of less than 1:100,000” (p.3) indicating that they are a very small percentage of the population when compared to exceptionally gifted who appear at a ratio of approximately 1:10000 and highly gifted 1:1000 (Belanger & Gagné, 2006). Even the most sizeable over-exaggeration would support the view that exceptionally and profoundly gifted children are an extremely small number among gifted school age populations.

Gross (2004) examined the differences between students identified as ‘highly/exceptional gifted’ (IQ 145-179) and ‘profoundly gifted (IQ 180)’ (p.6), and noted that “the higher the intelligence quotient of the child, the more significant are social/emotional pressures to moderate his or her achievements”. This reinforces much earlier research by Hollingworth (1926), noting significant social and emotional differences between moderately and profoundly gifted students. Whilst Gross (2004) details profoundly gifted as students with IQ 180, the main participant satisfied the Wasserman (2003) and Lubinski (2001) criteria for profound giftedness. Gross (2003) noted the WISC-III was impractical for the assessment of exceptionally and profoundly gifted due to the ceiling effect. It is noted that the main participant reached the ceiling of the WISC-III testing instrument.

Morelock (2000) stated that ‘asynchrony in the gifted population means a lack of synchronicity in the rates of their cognitive, emotional and physical development’ (as cited in Silverman, 2000, p. 4). Other researchers have noted that the more extreme the intellectual advancement, the more extreme is the asynchrony of development (Goerss, 2011; Peterson, 2009). The characteristics that may be evident with asynchrony include sensitivity, intensity, sensual, imaginational, intellectual and psychomotor overexcitabilities which can pose social and emotional challenges because these characteristics differ so greatly from those of their less intellectually advanced age peers.

Davis and Rimm (2004) also identified significant differences between moderately gifted and profoundly gifted students, in fact they noted significant differences between moderately gifted, highly gifted, and profoundly gifted children on every cognitive and affective trait, especially in their degree of intensity and energy. This intensity manifests in a number of ways including reacting to aesthetic, intellectual, emotional, sensual, and other stimuli and is often more pronounced in profoundly gifted students. Often this intensity provides the energy behind the drive to know, to create, and to become (Forstadt, 2009).

The operational definition of giftedness based on Gagné's Differentiated Model of Giftedness and Talent (1985, 2000, 2004, 2008, 2013) is referenced in this research specifically to understand the importance of internal and external catalysts for profoundly gifted students (DMGT 2.0, Figure 2). Gagné expanded on the concept of giftedness when he proposed a set of aptitudes or gifts, which a child develops into talents through interaction within a range of internal and external catalysts. This model includes a more detailed analysis of the talent development process which further highlights the importance of effective, positive school experiences for profoundly gifted students to realise their talents. Gagné (2010) explained the important role played by catalysts, which incorporate environmental and personality factors, and which enable high potential to be translated into high performance.

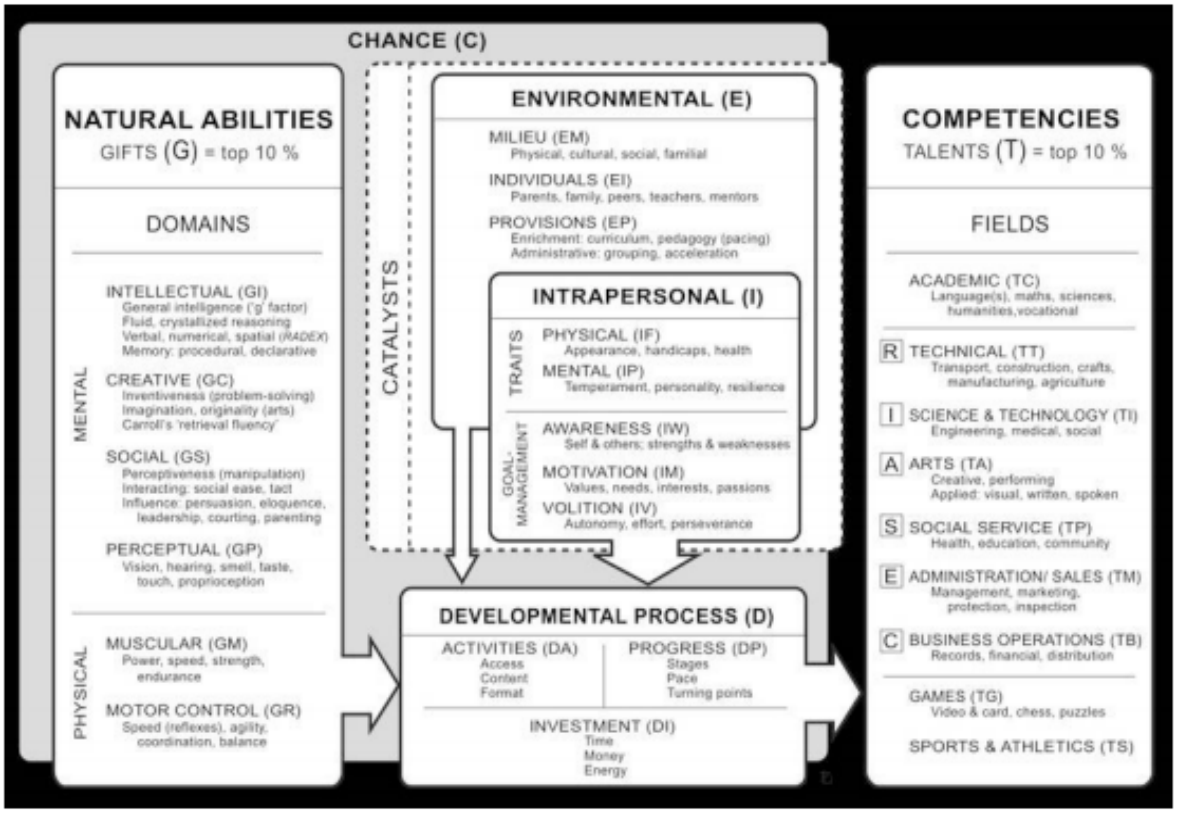

Figure 2. Gagné's Differentiated Model of Giftedness and Talent (DMGT 2.0; 2008 update).

Gagné's DMGT 2.0 model is widely utilised within the Australian school system and globally because it provides a framework for understanding the influence of intrapersonal and environmental variables on talent development. This is useful, particularly with profoundly gifted students where there are often areas of vulnerability including uneven development, perfectionism, adult expectations, intense sensitivity, self-definition, alienation, inappropriate environments, and role conflicts. There is general agreement that highly/profoundly gifted children are more susceptible to some of these types of developmental difficulties than moderately gifted or non-identified as gifted children (Gross, 2004, Roedell, 1984;).

More recently Gagné (2013) developed the Expanded Model of Talent Development embedding a 'basement' which represented the biological underpinnings of the DMGT 2.0. Specifically, the EMTD model made reference to genes and DNA responsible for

particular traits at the anatomical, biological and chemical levels. This model (Gagné, 2013, p. 15) drew on the work of cognitive neuroscientist John Geake (2009) whose research found that the "brains of gifted children are structurally different" (p.82) from their typical peers. Whilst this model is noted, it is not referenced as the updated revision refers to genes and DNA, not a particular focus for this research.

2.4 Education of profoundly gifted students

It has been posited that educational provision for profoundly gifted students in Australian mainstream schooling is ineffectively implemented (Gross, Urquhart, Doyle, Juratowitch & Matheson, 2011). This could be due to profoundly gifted students arising so infrequently in mainstream schooling, that there is often little recognition of how drastically different their education must be from that of their age peers, or from other children identified in the gifted range (Gross, 2000).

Robinson (2012) questioned the degree to which differentiation and intervention programs are currently utilised and applied to improving the outcomes for gifted students. What is even more disconcerting is that Ambrose, VanTassel-Baska, Coleman and Cross (2010) describe the field of gifted education as a 'fractured, porous, and contested academic discipline' with evident internal dissension. Gallagher (2011) argued that a more cohesive and coherent discipline would support teachers to develop the skills and knowledge they need to better understand and work with gifted students. In Ruby's situation, her teachers assumed that special provisions were in place throughout the school, but were unaware that Ruby and other gifted students still required immersion and differentiation in their mainstream classes. Differentiation was a concept that remained a source of discomfort for some teachers.

It was important for the purposes of this research that Ruby and the teachers responsible for the pathways and programs which she experienced both in primary and secondary school, provide narratives on resources as well as the level of autonomy given to students.

This research also presented the opportunity for the family to reflect and comment on the educational provisions implemented throughout Ruby's journey of mainstream schooling.

Gross (2006) emphasised the need for educators to place exceptionally and profoundly gifted students into an environment that will least restrict their opportunities for socialisation. This recommendation indicates that an inclusive classroom, with age peers, might not be the most appropriate environment because classroom teachers make only slight modifications in the regular curriculum to meet the needs of the gifted students (Renzulli, 2005). It is important to note that Ruby was placed with her aged peers throughout her entire schooling and was accelerated only by subjects not year levels.

Clark (2002) concluded that schools have a responsibility to facilitate peer relationships and recognise that a mainstream classroom is the most prohibitive environment for a profoundly gifted student because it cannot provide appropriate differentiation, intellectual peer interaction, continuity, flexible grouping, and teachers with specialized education in catering for profoundly gifted students. For a school, this results in a conflict between keeping the student in chronological age peer classes for administrative efficiency, and accelerating them based on their social and academic needs. Clarke (2009) stated that, "moderately gifted children waste nearly half their time in a regular classroom and highly/profoundly gifted children waste almost all of their time" (p. 13). This highlights the need to know more about how profoundly gifted students spend their time in mainstream classrooms by exploring how one profoundly gifted student reflects on her mainstream schooling and educational provisions provided to her. This issue is addressed in this research.

Profoundly gifted children and adolescents have academic needs that extend beyond the general population of gifted students. While a student identified as gifted could have his or her educational needs met by subject-matter acceleration and/or enrichment activities, a profoundly gifted student's educational needs are more likely to be met by 'radical acceleration,' defined as any educational progression that leads to a student

graduating from high school three or more years earlier than expected (Gross, 2006). Despite years of controversy about the benefits of acceleration, there is a body of research that supports positive emotional and academic effects of acceleration (Colangelo, Assouline, & Gross, 2004; Lubinski, 2004; Neihart, 2007; Robinson, 2012) for profoundly gifted students.

Lubinski et al. (2001) reported that the majority of a sample of profoundly gifted students described radical acceleration as contributing positively to their educational experiences. Findings by Gross and van Vliet (2005) supported the earlier finding that among profoundly gifted individuals, radical acceleration was successful, as defined by greater academic achievement, lower levels of anxiety, and higher self-esteem than similar-ability peers who were not radically accelerated. Radical acceleration is not often provided in mainstream educational settings: students who receive such extreme interventions are likely to be in a different type of school, such as a specialist school for the gifted, enrolled in a college class, or concurrently enrolled in high school and college. The better environmental fit that results from appropriate academic interventions, influences the social and emotional development of this population (Gagné, 2008). In this research, the main participant Ruby, was subject accelerated in some instances by two to three years but remained with her age peers for Home Room, Physical Education and the Arts at the request of her parents who were adamant that she should remain with her peers. Her reflections on these experiences are explored in this research.

Gifted students like any others seek out friends who are at the same stage of development. Gross (2002) stated ‘the conceptions of friendship held by exceptionally (children of IQ 160+) and profoundly gifted students bear little resemblance to those held by the considerable majority of children with whom they are likely to be grouped for purposes of instruction and, ironically, for purposes of socialization’ (pp. 27-29). Neville (2007) followed this by suggesting that profoundly gifted students progress better when they are grouped with other intellectually-advanced peers in accordance with their strengths, interests, and background knowledge of a topic. Therefore, schools need to be committed to supporting the profoundly gifted child by facilitating peer and teacher

relationships. However, the opportunity for profoundly gifted students to seek out other profoundly gifted students in a mainstream schooling context is problematic when the incidence of these students is very low. Clarke (2009) summed up friendships for profoundly gifted students by saying, ‘by their very excellence, they make it hard to find others with whom to share and places in which they belong’ (p. 13). The challenge of peer relationships was recognised in this research, with the opportunity for the main participant to reflect on her relationships throughout her formal schooling. The facilitation of mentors in mainstream schooling contexts was also explored.

Kesner (2005) suggested that for the educator, 'developing a secure relationship with gifted children is critical and at the same time more difficult than doing so with their non-gifted counterparts' (p.219) because of their significant social and emotional differences. Profoundly gifted children are among our most vulnerable because of their potential for social isolation and depression. Difficulties in the social context, can directly affect a profoundly gifted child or adolescent emotional experience (Gross, 2000). The challenge for teaching them and forming positive relationships is being able to find a way to nurture their souls and ease the burden of their exceptional minds.

Researchers argue that teachers have a social responsibility (Subotnik et al., 2011) to all students in the class, but often focus on those who are most visibly disadvantaged and vulnerable, ‘those viewed as most likely to ‘fall through the cracks’ without special attention' (p. 8). This is relevant to profoundly gifted students as the question of resources and the ability that schools have to accommodate the intellect, breadth of interest and/or pace of their cognitive ability is in question. The importance of relationships is addressed in this research with the participants reflecting on their own perceptions of teacher/student and student/student relationships and the impact on them, either positive or negative.

2.5 Teachers of profoundly gifted students

Teachers' perceptions, attitudes, and beliefs about gifted students influence classroom practices and identification procedures and are shaped by theoretical knowledge, understanding of gifted behaviours, gender bias, cultural stereotypes, socioeconomic status, beliefs about disabilities, education, and experiences (Akkanat & Gokdere, 2017; Sawyer, 2016).

Many researchers have found that teachers do not feel adequately prepared to meet the needs of gifted students, because this may not have been a focus of their teacher education, or professional development, or a part of education system initiatives (Loveless et al., 2008; see also Davis, 2006; Mills et al., 1994; Reis & Renzulli, 2010; Subotnik et.al 2011; Vaughn et al., 1991; Winebrenner, 2000). More specifically, Loveless et al. (2008) found that 65% of teachers reported that their teacher preparation courses focused very little or not at all on enrichment programming, and 58% admitted to not having any professional development over the past few years that focused specifically on high-achieving gifted learners. In this research, teachers are given the opportunity to reflect on their attitudes and perceptions, classroom practices and recollections of having the main participant, Ruby, in their class. This is particularly pertinent in this research where the challenge of finding the match between the school and the profoundly gifted student is heightened. Some priority is being given to differentiating learning experiences for gifted (Logan, 2011) students, but far less evidence is available to suggest appropriate learning experiences are available for profoundly gifted students.

Additional studies (Begin, Gagné, 1994; Copenhaver, McIntyre, 1992; Lassig 2009; Townsend, Patrick, 1993; Yanoff, 2007) suggest that teachers who have worked with gifted students have more positive attitudes toward them which is particularly relevant to this research because the incidence of profoundly gifted students in the mainstream regular classroom is minimal, and therefore it can be assumed that most teachers will not have had the opportunity to work with such students and may have negative attitudes toward the prospect of teaching them.

Gregoire (2003) indicated that teachers' philosophy and beliefs affect the way they meet the needs of gifted students and influence their instructional practices and goal orientation. For the profoundly gifted student, it is imperative that the teacher recognises and implements teaching approaches and strategies most appropriate for the individual. To support the teachers of profoundly gifted children, it is crucial that they are afforded the opportunity to collaborate with each other in order to recognise what approach to take with these students. More recently Hattie (2011) described collective teacher efficacy as one of the lead influencers of positive student achievement. Ruby's teachers came from diverse backgrounds, experiences and levels of professional experience and this research considers the link to teacher efficacy and one profoundly gifted student's experience.

Students of teachers with gifted and talented training reported that their classrooms had a greater emphasis on higher level thinking skills and discussion, and less emphasis on lecture and grades than did students of untrained teachers (Hansen & Feldhusen, 1994; Hong et al., 2011). The teachers in this research were given an opportunity to reflect on their professional development and comment on their individual experiences of teaching the main participant, Ruby. Ruby was also given the opportunity to reflect on teachers' approaches to teaching and classroom climate.

Teacher attitudes can be challenged through professional growth and development (Barth, 1990) which is important because of the impact on students: "When teachers observe, examine, question, and reflect on their ideas and develop new practices that lead toward their ideals, students are alive. When teachers stop growing, so do their students" (p.50). Appropriate professional development can be implemented and designed to confront and prevent negative attitudes of those most likely to be in opposition to gifted education, or for teachers with little experience teaching gifted students. Delisle and Govender (1988) discussed the need for parents and teachers to demand that professional development time be allocated to address the characteristics of highly and profoundly gifted students and how best to serve them. The concerns related to teachers' attitudes is addressed in the research reported here by providing

teachers with a voice to reflect on their experiences of teaching a profoundly gifted student, as well as the individual student's experience of her teachers.

2.6 Social and Emotional Development of profoundly gifted students

Longitudinal studies of profoundly gifted young people (Bloom, 1985; Brody, Lupkowski, & Stanley, 1988; Brody & Stanley, 1991; Gross, 2004; Hollingworth, 1942) have traced the positive and negative outcomes, for social and emotional development, of various educational interventions. Muratori et.al. (2006) discussed how more can be gained by studying what worked well in the development of brilliant and highly successful people throughout their education and how they coped with impediments.

The social and emotional characteristics of the profoundly gifted are inextricably linked, sometimes manifesting as strengths and sometimes as vulnerability factors. Gross (2006) in her longitudinal study of profoundly gifted students, noted the low probability of a profoundly gifted child meeting a same-aged, similar ability peer. This likelihood, combined with the possibility that intellectually equal, much older peers may not socially engage with them (Gross, 2006), means that they are especially at-risk of social isolation. Difficulties in the social arena, then, can negatively affect a profoundly gifted child's emotional experience (Gross, 2000). Significantly, Hollingworth (1926) noted that above IQ 160 the difference between an exceptionally or profoundly gifted child and his or her peers is so significant that it can lead to issues of development that are correlated with social isolation. This research explores whether Ruby's profound giftedness resulted in acute sensitivities.

Contemporary schools often facilitate acceleration programs to meet the academic and cognitive needs of gifted students, but pay little attention to fostering affective development of these students as they accelerate and experience physical isolation due to working independently, but also a social and emotional isolation. This isolation also stems from the students not having a strong sense of belonging because they are not identified as being in one particular cohort but move fluently between a number of cohorts. This is particularly detrimental for profoundly gifted students due to their unique social, emotional and academic needs naturally isolating them. It is important that

schools recognise and address profoundly gifted students' affective development as part of any acceleration program. This research explores the main participant Ruby's lived experiences of acceleration both from an academic and affective perspective.

Janos (1983) further reinforced Hollingworth's findings (1926) by recognising that the social difficulties experienced by this exceptionally or profoundly gifted group were caused by the absence of a suitable peer group with whom to relate. Asynchronous development of exceptionally or profoundly gifted students coupled with their emotional intensity combines to create an inner experience and awareness that is quantitatively different from the norm. This emotional intensity and asynchronous development increases with higher intellectual capacity possessed by profoundly gifted students (Silverman, 1993). This is particularly pertinent to this research which investigated a profoundly gifted student in the context of two relatively small mainstream schools where the opportunity for peer relationships presented challenges as like-minded students simply did not exist at Ruby's intellectual level.

Renzulli (1977) argued for supporting the gifted student holistically, fostering not only their academic abilities, but also their social emotional development. Specifically, he claimed that psychological characteristics including intrinsic motivation, creativity, resilience and task persistence are equal in importance with intellectual and academic abilities and thus should be supported in educational programs throughout formal schooling (Subotnik et al., 2011).

Moreover, Subotnik et al. found that gifted students who have experienced a diverse all-round education stood out from their high achieving peers who had not developed the same level of affective skills throughout their schooling:

> *Qualities such as willingness to take strategic risks, the ability to cope with challenges and handle criticism, competitiveness, motivation, and task commitment will differentiate those students who move to increasingly higher levels of talent development from those who do not (p.40).*

This research explores the provision of enrichment programs as part of a mainstream school initiative to cater for and extend gifted students. An adolescent who seeks intellectual challenges and social acceptance in a non-supportive classroom environment may experience dissonance from peer group norms, and may attempt to conform to social norms and disregard or downplay their academic achievement to fit in (Neihart, 1999; Wright & Leroux, 1997). Interestingly, it has been found that students who are able to find intellectual peers through enrichment programs and/or placements generally feel less pressure to conform and experience more freedom to pursue academic studies (Reis & Renzulli, 2004). This is particularly pertinent for profoundly gifted students who vary from peer group norms and may find it challenging to fit in with social norms.

Focused enrichment activities provide students with the opportunity to be withdrawn from their mainstream classes to learn in groups with like-minded students, enabling them to practise their social skills in conjunction with their academic studies (Moon & Ray, 2006). Such support also enriches their emotional development and resiliency.

Self-acceptance has been noted as a significant challenge for gifted youth (Niemiec et.al., 2012); therefore, providing an affective curriculum that teaches gifted students how to advocate for themselves and build resilience is an important component for their development. Rosenburg and Campbell (2012) noted profoundly gifted students' asynchrony increases with higher intellectual capacity which renders them socially and emotionally vulnerable. In the context of self-acceptance, the complexity of thought processes, intensity of sensation, emotion and imagination means that profoundly gifted students are most vulnerable when provisions for asynchronous development are not addressed. Sartor (2005) argued that, without appropriate provisions, a loss of self which translates to lack of achievement and loss of potential becomes evident.

As Read (2011) found in her case study that examined gifted primary students' social behaviour in summer enrichment programs, effective programming should help struggling gifted students make academic and social gains by providing them with opportunities to re-motivate and ignite their passion for education, and meet their

academic and social-emotional needs. Advanced learners have been acknowledged as needing the opportunity to recognise their preferred approaches to learning, develop strong self-concepts of their academic abilities, and participate in meaningful and challenging school experiences that address their unique and rather individualized talents (Hébert, 2012). Effective programming for high ability learners must take into account the uniqueness of each learner and include provision for their asynchronous social and emotional development, while promoting their enjoyment of learning, and fostering individual talent development (Reis & Renzulli, 2004) rather than offering one or two academic disciplines that do not appeal to the unique interests of gifted learners with strengths in artistic, musical, or psychomotor areas. Enrichment programs in which the teacher serves as the mentor or provides guest mentors in various disciplines have been found to, significantly benefit students' affective development by increasing their self-understanding and self-confidence, commitment, empathy, self-trust, responsibility, while promoting an overall positive self-image (Hébert, 2012). This research is relevant to profoundly gifted students because it suggests that teachers who act as mentors rather than classroom teachers, have the potential to make a positive impact on the affective development of these students. Profoundly gifted students in mainstream schools may not have access to an appropriate enrichment and extension program or the facilitation of a mentor to augment their school experience. Such provisions could serve to alleviate the frustrations experienced by profoundly gifted students.

The social/emotional and educational issues facing gifted and profoundly gifted students in mainstream schooling discussed in the research literature highlight significant differences between the needs of gifted and profoundly gifted students. However, there has been limited research regarding the unique experiences of profoundly gifted students in mainstream schooling, a gap this research seeks to fill.

2.7 Profoundly gifted students and their families

The importance of parental involvement in schools for gifted students has been the focus of previous studies (Jolly & Matthews, 2012; Morawska & Sanders, 2008, 2009a, 2009b; Reichenberg & Landau, 2009; Silverman, 2013). Vialle (2017) noted the

importance of families supporting the development of giftedness through the provision of appropriate support and resources, parental modelling of behaviours, and expectations.

Delisle (2009) described parents as the key to detecting giftedness in children, often from infancy. With this is mind, it is important for schools to enable an early collaborative partnership with parents, as their interest becomes both an individual and collective responsibility.

Many studies associate improved student achievement with increased parental involvement with the child ‘s school. Holt et al. (2011) confirmed that academic benefits for gifted students increase exponentially when parental involvement is coupled with encouragement and support. There is no evidence to suggest this would be any different for profoundly gifted students. In this research, the relationship between school and home is addressed and the nature of the parents’ involvement in Ruby’s education. Teachers were also provided with the opportunity to reflect on their relationship with the parents of a profoundly gifted student.

Gallagher 2011) noted that parents’ voices in the research literature on gifted education provision are limited. This research addresses this gap by including the voice of the main participant’s parents in the research.

Very few studies have assessed the impact of profoundly gifted children on the lives of parents and siblings (Colangelo & Brower, 1987; Cornell, 1984). Lapidot-Berman and Oshrat (2006) noted that gifted children often attract a good deal of attention and require extra resources, which creates special pressures for siblings, parents and other family members. Parents of gifted and talented children face many of the same parenting challenges that all parents experience and navigate (Pfeiffer, 2013b). Like most parents, they want the very best for their children and often have very high expectations of schools and teachers in regard to programs for their child. The impact of Ruby’s giftedness on the family is addressed in this research by the inclusion of the perspectives of her siblings and parents.

Keirouz (1990) highlighted that many parents of gifted children agonise over the responsibility of adequately stimulating and challenging their gifted child, both at home and at school. Parents also express frustration and dismay at their school's reluctance to explore the issue, and failure to cater to their child's special educational needs. Some parents believed this was a result of inadequate support, professional neglect and lack of understanding from educators and school leadership. Teachers often realise and experience the frustrations of parents and this may impact the teacher's attitudes towards gifted students and school provisions.

For parents of profoundly gifted students their challenges are exacerbated with fewer accessible options for addressing the unique needs of these students. They make critical decisions to ensure the best outcomes for their child. Parental advocacy and involvement in their child's education is crucial because the child's degree of advancement is both profound and rare, and their needs are less likely to be addressed by their school - in fact, it may not be achievable in a traditional education setting. In this research, the parent advocate is explored and how this role may have shaped the education of the main participant, Ruby.

2.8 Summary

This review of the literature on gifted and profoundly gifted students revealed that understandings of 'giftedness' and 'profoundly' gifted students vary depending on cultural and educational contexts. Considerable research indicates, that whilst moderately/highly gifted students can often fit into regular classrooms with differentiated instructions, pull-out programs, or acceleration options, profoundly gifted students progress better when they are radically accelerated and grouped with other intellectually-advanced peers in accordance with their strengths, interests, and background knowledge. Whilst the research indicates this, the reality is that most profoundly gifted students in the Australian context will attend mainstream schools, or in some states selective schools. Profoundly gifted students require individual attention and management strategies to develop their cognitive, social, emotional, and physical skills. Grouping profoundly gifted students allows them to study concepts at the

appropriate pace, depth, and complexity so that they feel valued and normal (Rogers, 2007).

Research highlights the influence of teachers' perceptions, attitudes, and beliefs about gifted students and the way they affect classroom practices and identification procedures and teachers' feelings of being inadequately prepared to meet the needs of gifted students. For profoundly gifted students this is further exacerbated by their qualitative and quantitative difference from the norm (Daniels & Piechowski, 2009). In this research, teachers are given a voice to provide multiple perspectives of the experiences of the main participant's journey through mainstream school. It is recognised that profoundly gifted students need teacher and parent advocates to be successful when attending mainstream schools (Gilman, 2008).

Parents and siblings provide a critical role in the universal development of the profoundly gifted child. Research discussed the need for parents of profoundly gifted students to strongly advocate and collaborate with schools throughout their child's schooling to ensure appropriate educational provision. Thus, the views of parents and siblings are sought in this research to help understand the schooling experiences of a profoundly gifted student.

Chapter 3

Research Methodology

3.1 Introduction

This chapter describes the research design and methodology of the dissertation. After presenting the research methodology, the researcher position, data collection, methods of analysis and findings are reported. Following this, limitations of the design of the study are presented. Finally, there is a description of truthfulness and ethical concerns.

3.2 Research Methodology

'Story makes the implicit explicit, the hidden seen, the unformed formed, and the confusing clear' (Chou, 2013, p.59).

Participants in this study included the main participant 'Ruby' and her family (parents and two younger female siblings), her educators (throughout both primary and secondary stages of schooling), and myself as former educator and observer, and now researcher and participant. Some of the secondary participants in the study were older and did not have the same degree of memory, but were still able to share and recall their own experiences of being involved in Ruby's life.

It is through narratives that humans gain a sense of identity while having an opportunity to find their voices to tell their stories of experiences, listen to and hear the voices of other people (Spector-Mersel, 2010), and 'gain new understandings of their own lives and the lives of others and the communities within which they live' (Beattie, 1995, p. 59). Narrative studies provide a rich forum for hearing about different kinds of knowledge that come directly from experiences of the participants and have the potential to shape reality (Spector-Mersel, 2010) and bring new meaning (Beattie, 1995) to situations such as this one that concerns schooling for profoundly gifted children like the main participant in this study, Ruby. Having Ruby *tell* her story, is just as much about her learning from and about herself as it is for others to learn from and about her.

Narrative methods suggest that we understand ourselves and the world around us by interpreting processes and sharing our narratives of experiences (Spector-Mersel, 2010). These narrative experiences reveal what is meaningful to individuals, and in this case can guide educators to make suitable provisions in programming and support for profoundly gifted students.

Andrews, Squire and Tamboukou (2013) confirmed that narrative inquiry is based firmly on the premise that, as human beings, we come to understand and give meaning to our lives through story. This approach provides me as researcher with a rich framework through which I can privilege the story of my key participant, Ruby. Stories are the central element of reality and experiences, and in Ruby's case provide an avenue to explore the relationship between her and her teachers, and family, as well as provide insight into the impact on her of various experiences. Just as our stories reveal where we have come from, they also define how people see us, but not necessarily who we really are, or where we are going.

Walker and Unterhalter (2011) noted that stories open up the possibility of seeing anew, of representing complexity, uncertainty, contradictions and silence. Thus, narratives give our lives meaning. As the researcher, I selected narrative inquiry, as suggested by Webster and Mertova (2007, p.3) because it aims to capture 'the whole story', whereas alternative methods have a tendency to communicate an outsider's perspective of studied subjects or phenomena at certain points only, which may not give an accurate account of the experience.

3.2.1 Research Paradigm

This study is located in a qualitative, constructivist, and interpretivist paradigm where social reality is argued to be multifaceted, fluid (Spector-Mersel, 2010), and created out of interactions (Clandinin & Connelly, 2000). Reality, being created out of experiences, relies on human interpretation to provide clarity and meaning for those experiences.

Narrative inquiry enabled Ruby's voice to be heard. Principles of narrative inquiry, including dialectics and evocativeness were used to give space to different voices and interpretations of the same events and to ensure the reproduction of voices from the research participants were as authentic as possible. This was achieved by visiting the original school sites as part of the interview process to elicit emotional responses to their lived experiences (evocativeness) and presenting different voices and interpretations of the same events (dialectics).

Unstructured interviews were used to allow participants to largely shape their stories. Framing the interview sessions into meaningful conversations, demonstrating open body language, removing barriers and showing interest in the participants facilitated a positive rapport. As the researcher, I developed detailed understandings of the participants' perspectives about the research topic and interview questions.

The interpretivist/constructivist paradigm grew out of the philosophy of Edmund Husserl's phenomenology and Wilhelm Dilthey's and other German philosophers' studies of interpretive understanding called hermeneutics (Mertens, 2005). The interpretivist paradigm recognises multiple interpretations and meaning of given situations (Henning et.al., 2004). In this research the main participant, her family and teachers all provided interpretations of the journey of Ruby's mainstream schooling.

Reliance on semi-structured, open-ended techniques were used, with photographs used to elicit memory. The constructivist paradigm framed my interviews by ensuring the participants were given the opportunity to question, reflect and build on their past experiences. As the researcher, I worked hard to facilitate the construction of knowledge rather than the reproduction of facts by utilizing open ended questions

followed by probes using the participants' own words to generate questions that elicited further descriptions (Roulston, 2010). A balanced representation of views from the main participant Ruby, her teachers, and family members was sought, however an expectation that because this story is Ruby's, the overall experience and narrative should be largely reflective of her as the main participant.

People 'dream, remember, anticipate, hope, gossip, doubt, plan, criticize and love through narratives' (MacIntyre, 1984, p. 211). Using a narrative approach (Clandinin & Rosiek, 2007), to investigate one gifted student's school experiences, allows the participant (Ruby), her family and teachers to share their own perspectives of the experience in the form of their own stories. Narrative inquiry is valuable for the aims of this research because it fosters development of a deeper understanding of Ruby's experiences, perceptions, beliefs and values, so that a better understanding can be developed of the nature and impact of profound giftedness on one student's schooling.

3.2.2 Conceptual Framework

Three commonplaces of narrative inquiry, temporality, sociality, and place, define dimensions of an inquiry and serve as the conceptual framework for this study (Clandinin & Connelly, 2000). In addressing temporality, sociality, and place, I studied the complexity of the relational composition of Ruby's lived experiences both inside and outside of the inquiry, as well as to imagine the future possibilities of her life by ensuring I explored the commonplaces simultaneously throughout the research.

Temporality, in essence, refers to the temporality of Ruby's life as well as the temporality of places, things and events. Connelly and Clandinin (2006) discussed temporality stating, 'events under study are in temporal transition' (p.479). In this study, Ruby's pathway through school was temporal in that her progress was dependent on events and results within and outside of school.

Whilst temporality may be defined as the 'subjective progression through moments', time 'attempts to objectively measure and mark that progression' (Joelle, 2014, p.3). Ruby's accelerated experience in mainstream schooling was not bound by perimeters of

time, but at a pace dictated uniquely by her and her special needs. This meant that the passage and progress of Ruby's education was almost all temporally based on accelerated year levels and her progress through these, rather than a fixed time. She was provided with the flexibility where possible to create her own pathways. There were numerous opportunities throughout the interview process for Ruby to reflect on her accelerated and subject progression throughout her schooling with open ended questions directed specifically to her about this provision.

'Sociality' encompasses the personal conditions whereby the feelings, hopes, desires and moral dispositions of Ruby are considered. Social conditions refer to the conditions under which Ruby's experiences and events unfold (Connelly & Clandinin, 2006) including her cultural, familial and school contexts. To understand and elicit Ruby's feelings, hopes and desires her family and school were visited on a number of occasions. I spent time ensuring we had developed a sense of mutual trust to ensure she felt comfortable sharing her intimate and honest thoughts and reflections.

Connelly and Clandinin (2006) define place as 'the specific concrete, physical and topological boundaries of place or sequences of places where an inquiry can take place' (p.480). Our identities are linked with our experiences in a particular place or places and with the stories we tell of these experiences (Silko, 1996). In this research, the school is considered the predominant place, although both school and home locations were used for interviews.

3.3 Researcher Position

'The intimacy of qualitative research no longer allows us to remain true outsiders to the experience under study and, because of our role as researchers, it does not qualify us as complete insiders. We occupy the space between' (Corbin-Dwyer & Buckle, 2009, p. 61).

My role as researcher was largely driven by my time and experience in gifted education. Over an eight year span I was employed by the Lutheran Education system based in a Foundation-12 school in Adelaide, South Australia. My role in this school was to

oversee all students who fitted the definition of ‘exceptional learners’ and to lead a department of specialised staff.

In my role as researcher I have had access to such documents, which supported my recollection of events during the years spent supporting, mentoring and teaching Ruby. Students in the exceptional learner’s program also wrote a reflective journal and I was able to refer to the reflective journal of the main participant or supporting data.

On reflection, my individual experience in gifted education and particularly in my time with Ruby, could be described as a contrast between helplessness and frustration, and a feeling of great pride and accomplishment. Taking on the privileged role of researcher, however, gave me the insight to better understand how and why the highs and lows occurred. Being able to stand back from it, and after a period away from Ruby, meant I was not so much ‘removed’ as I was more objective; viewing through a lens that was less black and white and with more shades of grey.

As researcher I had time to think about specific questions. When I was teaching and supporting Ruby, I was perhaps too busy looking for short-term fixes rather than the longer-term view, only to now question the impact of Ruby’s experiences a decade later.

Throughout the research process I learned more about both general and specific traits of profoundly gifted individuals and this shaped my understanding of Ruby and how she processed experiences, as well as confirming for me some previously held beliefs in terms of giftedness and acceleration. Some traits that were particularly dominant included her exceptional memory recall, her intense exploration of an issue in detail and her often exaggerated responses to events or experiences particularly when provided with photos for memory elicitation.

My empathy for Ruby grew as she opened up and shared her experiences, fulfilling a need for revisiting and closure.

I was in a privileged position as researcher to have had prior knowledge of and experience with the main participant Ruby, as her teacher and gifted mentor. Although

we shared a history of mutual respect, this privilege brought with it, responsibility. With ongoing open dialogue our working relationship gained a deeper trust.

There was almost a role reversal whereby Ruby as the subject became ‘teacher’, and myself as the researcher became ‘student’; just as most of Ruby’s educators had always been.

I could better appreciate and understand how Ruby’s recollection of formative events and experiences helped shape her understanding of her giftedness, by voicing the intangibles in story form.

I was guided in my position as researcher in this study by Raheim et.al. (2016) and Genette’s theory (1992) of narratology which distinguishes three fundamental entities: story, narrative and narration. This theory supports the notion of ensuring a close relationship between researcher and participants, where an anti-authoritative researcher–researched relationship with continuous reflective awareness was paramount. I assumed a close relationship with participants by ensuring an open, honest dialogue with clear articulation of the purpose and procedures of the study. Throughout the interviews I was conscious of ensuring I read and responded to participants’ body language and maintained my highly attentive, interested and positive body language. In the first interview sessions we met at the two school sites which assisted to build rapport as it was common ground for both the participants and the researcher.

Genette’s theory assisted me to clearly formulate my role as researcher. My narrative position, perspective, and voice represented me as the researcher by defining my role in relation to the study. Genette discussed narratology as a vehicle to understand the relationship between the narrator and the story told. Genette (1988) noted that two important dimensions in narratives are perspectives and voice, and that the narrative perspective involves the relationship between the narrative and the story, and defines whether the story is seen from an internal or external point of view. The relationship between myself and the research process (collecting data, analysing data, and writing) was considered, and it was determined, that as the researcher, I was to be represented

in the research story by being portrayed as a minor character (past teacher). I could not be considered an objective observer as I had in some cases been directly involved in events described by the participants. As a minor character, however, my role as researcher was to tell Ruby's story from an external perspective through multiple voices including my own.

Participants were informed of the purpose and process of the study at the beginning of the study, and were given the opportunity throughout to challenge, modify or add content. There was consistent and honest communication between myself, as researcher, and Ruby as main participant. This allowed for continuous reflection throughout the process for both parties, ensuring themes within the stories were consistently clear.

Reflexivity concerns thoughtful, analytic self-awareness of researchers' experiences, reasoning, and overall impact throughout the research process. In qualitative methodology primacy is given to pre-understanding and openness, closeness and distance, co-construction and situating of knowledge, trustworthiness and integrity, and power relations, and ethical dilemmas (Dahlberg, Dahlberg & Prevan, 2008; Finley, 2002; Kvale & Brinkmann, 2009).

Reflexivity in qualitative research is affected by whether the researcher is part of the research and shares the participants' experience (Berger, 2015). It is viewed as the process of continual critical self-evaluation of the researcher's positionality as well as acknowledgement that this position may affect the research process and outcome (Bradbury-Jones, 2007). In order to self-monitor the impact of my biases, beliefs, and personal experiences I needed to focus on self-knowledge and sensitivity, to recognise and take responsibility for my own situatedness within the research, to be aware of the effect on the participants, research questions, data collected and data analysis.

Therefore, reflexivity challenges the view of knowledge production as independent of the person producing it (myself).

'It is clear that participants—narrators—stand at the center of narrative studies; not as informants, seen as in some qualitative traditions, but as active agents, inseparable from the phenomenon under inquiry' (Spector-Mersel,2010, p.217).

3.4 Data Collection

The ultimate aim of the data collection in this study was to elevate the ability to capture the truthful essence of the stories and experience of the main participant (Dibley, 2011).

In presenting the narrative in chronological order of Ruby's experiences, and as part of the interview process, it was important to take Ruby on the journey, starting with her earliest memories. As her interest, enthusiasm, trust and rapport were gained and subsequently amplified, her recollections developed into an unfolding of experiences, which also assisted in her memory recall.

Data collection involved the collection of rich authentic stories told by Ruby in her words and supported by stories and commentary from her teachers, parents and siblings. I initiated this by meeting first with Ruby to identify all the events she felt were significant in her journey and then asking her to write a timeline that represented key moments in her journey through education. I used this timeline as the basis for collecting stories from everyone in the study through informal interviews.

I was guided by a modified version of the Biographical Narrative Interpretive Method (Wengraf, 2001) whereby I worked on interviewing to facilitate storytelling that would elicit accounts of Ruby's mainstream schooling experiences. Interviewing was not about delivering a series of questions to the participant in order to elicit a standard response, but allowing the narrative to unfold, bringing both new or perhaps assumed perspectives about Ruby's experience and that of her family and educators.

Interviews that involve self-reflection and storytelling are important because they can delve beneath statistically driven generalisations that are often made about gifted students (Watters & Diezmann, 2003). It was my goal to see the research topic from Ruby's perspective, and to understand how and why she came to have this particular perspective. To meet this goal, I ensured the interviews had a low degree of structure, a

prevalence of open questions, and a focus on ‘specific situations and action sequences in the world of the participant’ rather than general opinions (King & Horrocks, 2010, p14) and followed the timeline initiated by Ruby. Thus, Ruby was given every opportunity to shape her own narrative in her own words.

This structure permitted a variety of topics to be covered, and allowed the stories to be probed and for me to be responsive to relevant issues raised spontaneously by Ruby. As researcher, it was imperative that I listened and understood Ruby’s stories in order to ascertain how to probe further if necessary to obtain deeper meaning.

This process was further heightened by allowing Ruby and participants to engage in dialogue, through telling stories triggered by various items such as photographs, awards, and journal entries. I assembled stories from family members and past teachers who had shared experiences with Ruby. I endeavoured to situate myself in the research by telling Ruby of my own personal experiences and reflections whilst in my past role as her teacher and mentor, in order to build rapport and open communication, and to come to a mutual, deep understanding of the issues or events in question (Ellis, Adams & Bochner, 2010).

Whilst situated in the research as researcher, I needed to put my own knowledge and intuitive understanding aside so as not to cloud my depth of understanding of Ruby’s perspective. Rubin and Rubin (1995) noted that the researcher needs to remain neutral when responding to participants and demonstrate empathy without becoming over-involved.

3.4.1 Interview methods, participants and settings

Presenting Ruby’s history as a reflective recount made her experiences come to life for both her and the reader. Whilst the integrity of Ruby’s recount was not altered, she granted the creative licence to reinforce these stories and their themes through a narrative approach, which she embraced as a true embodiment of her experience.

A mere summary of Ruby’s experiences would have deprived the findings of authenticity and the depth made possible in narrative form. Having Ruby tell her story in

its chronological order unfolded the layers of complexities in the life of a profoundly gifted student.

Adding to the authenticity of the narrative inquiry process was the physical setting and surrounding environs in which the interviews took place; where possible interviews were conducted in the original settings where Ruby's experiences occurred. This enhanced the ease of extracting information and memory recall of participants.

In the case of Ruby and her family members, two interviews took place in the family home in which she grew up, providing a familiar and secure environment as well as encouraging Ruby to be in tune with her thoughts and free with her expression. Out of sight of her siblings, she proudly claimed the territory as being like a 'sanctuary', not in its presentation but for the satisfying experience and secure feeling it gave her.

Interviews with Ruby's sisters and parents were conducted in the large family room of their house, a space fondly recalled as a place of congregation for them, eliciting humorous stories being retold as well as periods of tension when attempts were made to understand or explain elements of Ruby's giftedness.

Ruby's teachers as well as Ruby were interviewed in the physical setting of the schools where they taught and which Ruby attended. In some cases, the interviews took place in the classrooms where Ruby was a student.

For the teachers who were no longer at the relevant schools, interviews took place at an external location, and follow-up questions were communicated as required. Ruby met in person those teachers still working at the school. The impact of these meetings on participants was evident and demonstrated signs of mutual respect. Teachers were also more at ease as the pressure of 'results' was no longer an issue, and the banter between participants assisted and enhanced recall.

Upon completion of each interview I made handwritten notes including details of the participant, their relationship to Ruby, the interview date and its location. I noted points of interest, and follow up questions, the receptiveness and efficiency of the participant in

answering the questions, as well as possible changes to make for the remaining interviews.

Also adding to the memory recall and accuracy of secondary participants, Ruby's educators, was the uniqueness of Ruby's gift and special needs, and their shared experience. Such an opportunity is not granted in every teacher's career.

When the interviews took place Ruby was aged between 23-25; her recollections date back to when she was five, and she was able to recall clearly her early life. While Ruby was recalling a specific event or experience, there were occasions when another memory from a different time was elicited.

The secondary participants, her family and teachers - were also interviewed 5 to 18 years after the events. The teachers' recollections of Ruby came easily, as her giftedness set her apart from her peers. She impacted and challenged her teachers in ways they had not experienced before. Ruby's obstinacy was remembered for both the confrontations and rewards it brought.

Rubin and Rubin (1995) discussed the use of content mapping and content mining questions. They noted the use of content mapping questions to open up dimensions and issues to the participant, and content mining questions to explore the detail that lies within each dimension, to determine meaning and understanding from the participant's point of view. I endeavoured to use both types of questions to elicit more information and explanations from Ruby's stories. To this end, I used probes to clarify (Legard, Keegan & Ward, 2003) and verify details and sequences, challenge any inconsistencies, and allow Ruby to elaborate further on her experiences and explain her feelings, views and actions.

To ensure I accurately documented this information, all conversations where possible, were recorded with Ruby's permission. This practice ensured that everything said was preserved for analysis. As researcher, I also listened for ways to improve my questioning technique. These notes allowed me to monitor and further process the data that was collected so I could analyse the data at a later time. The rhetorical convention

of expressing theoretical postulates by giving voice to participants' experiences by using extensive quotations meant I needed to ensure I recorded accurate quotations throughout the interviews. The pauses, repairs in sentences, laughter and turn taking was noted and considered in the context of the analysis (See Appendix D).

3.4.2 Memory Recall at interview

This study relied on Ruby and the participants recalling events and experiences from 8-20 years ago. Fry and Hale (2000) noted that one of the most prevalent characteristics of profoundly gifted students is exceptional memory. In the case of these participants, the rarity, novelty, and uniqueness of their participation in Ruby's education Ruby elicited in part their ease of recall. It was fortunate that Ruby has exceptional memory recall because she was able to focus on her developmental ages and stages, creating the setting to extract the most authentic account of her experiences, while also allowing her to trigger memories out of context.

Some studies have explored the relationship between giftedness and memory ability and concluded that gifted children display a higher rate of memory capacity compared to students not assessed as gifted (Gaultney, Bjorklund, & Goldstein, 1996; Harnishfeger & Bjorklund, 1994).

Robert Kraft (2016) discussed how recovered memories contribute new episodes to our early-remembered self and add to our collection of self-defining autobiographical memories while reversing the subtraction process brought about by the distance in time. These recovered memories can also restore forgotten episodes, known as memory directives. Narrative and semantic influences can alter memories that can then be corrected by visiting the actual sites of these memories.

Kraft (2016) explained that retrieving a long-term memory involves two factors: 1) the memory representation itself and 2) the retrieval pathway to that memory. Memory representations of personal events can remain vivid and detailed over many years. Pathways to a memory can be reactivated by retrieval cues at the actual sites of the events. This is how a memory that has not been thought of for years can return with

surprising clarity and detail. When these older memory representations are retrieved, the information is undiminished. Revisiting the site of old memories suggests a vast collection of unremembered events can be represented in considerable detail.

For Ruby, there were possibly more memories conjured during her 'old school' visits which she didn't share with the researcher. These may have been things she may have needed to keep for herself, free from examination.

Ruby's memories appeared fluid, accurate and meaningful. In the course of interviewing Ruby, photo elicitation was also adopted to trigger and prompt her memory recall. Banks (2001) discussed the use of photographs in ethnographic and social studies research 'to invoke comments, memory, and discussion in the course of a semi-structured interview' (p. 87). The contexts of the photos provided a familiarity for Ruby, and fondness for the subjects and events. They also enabled me to probe discussion of her social relationships (Rasmussen, 2004; Smith & Barker, 2004) and events that were significant to her. Harper (2002) found that using photos improved the quality of interviews because it prompted memory, reduced misunderstandings and elicited higher quality and more comprehensive interviews.

Throughout my ten-year association with Ruby, I compiled reports on observations of her and referred to official documentation relating to school events, educational attainment and awards. Photographic documentation was also used to assist triggering Ruby's memories of events.

3.4.3 Additional Data Collection

Written questions generally posed by email were given in cases where a personal interview was not possible, or used in addition to an interview as follow up to clarify or glean extra information. Email questions enabled participants to be more considered in their responses, given more time for recollection and reflection enhanced some of the data by providing more detail, specifically related to recollection of dates. Phone calls were also used to glean additional insights and details from the participants.

Journal entries provided an authentic voice portraying Ruby's age and stage, as well as acting as a trigger to elicit greater depth of experience and information.

School documents, photos and videos also acted as prompts for memory recall. These included handwritten notes from Ruby's father at parent teacher meetings, school report cards, field trip reports, photo recollections and videos of Ruby performing in school events.

3.5 Organizing the Data

Before commencing analysis, significant time was spent organizing the data. As researcher, I followed McLellan et al.'s (2003) Guidelines for Managing Qualitative Data. These guidelines include the following steps that were applied to the data dependent on requirements within the study:

1) I kept copies of important information by using Google drive to keep copies of information and files in a folder structure that was easily accessible throughout the research process.

2) I arranged field notes or researcher commentary in chronological order or quantitative data file schema by using Google drive to arrange field notes and allow for the development of a site map that date and time stamped all transcripts, draft edits and field notes.

3) I created a system for labelling and storing interviews that included a unique name or case identifier for each file so crucial information was communicated about the file to me as the researcher. All interviews were stored by allocating each participant a data folder. Within each folder, transcripts, notes and correspondence were independently stored and files were dated automatically.

4) I catalogued all documents, photos and journals by scanning, labelling and moving them into the appropriate folder.

5) I provided for the safe storage of all materials on the cloud through Google. Google have received certification for rigorous security, privacy and compliance standards so

that data are safe, private and secure. Whilst this was so, portable hard drives were used in the initial phase to store digital audio files before these were transcribed.

6) I checked for missing data and spent many hours reading and confirming that I had recorded all of the data collected into the appropriate locations in order to be able to access and analyse them.

7) I developed a process for reading and reviewing the transcribed text in order to engage with it. I carried out, ongoing reading and reviewing of notes throughout the study and recorded all interviews with date and time stamps.

3.6 Analysis of Data

'How we analyze and interpret interview transcripts, indeed any texts, reveals the personal and social stances we take up in relation to learning and to life, our underlying assumptions, presuppositions and the wider social discourses to which we belong' (Grant, 1996, p.111).

Finding ways of interpreting and demonstrating meaning in different types of stories can be challenging. I adopted a 'narrative inquiry' of data using narrative representation to unify all of the data (Clandinin & Huber, 2006) and then represented the findings through story. Upon analysing the data, I formulated answers to the research questions (Clandinin, 2007, p.15). I selected the elements and stories for analysis that best portrayed the answers to the research questions. I followed clearly identifiable steps in analysing and interpreting the qualitative data as outlined by Riessman (1993; 2001; 2004) and McCormack (2000). Whilst some of the data was retelling of the story by me, Ruby's distinctive voice provided an authentic way of communicating the unique richness of her experiences.

Throughout this analysis, I endeavoured to develop a level of familiarity with the data by immersing myself in the transcripts. I achieved this by attempting to remain objective, through the process of active listening and by using this as a learning process. Clarifying uncertainties with the participant through follow up questions, rather than assuming the answers was a method adopted along with identifying narrative processes

used by the participants. Paying particular attention to the language used and acknowledging context and identifying moments where something unexpected may have arisen was also important when working through the data (McCormack, 2000).

Texts were created from the narratives which were then analysed using various frames and lenses (McCormack, 2000). These lenses included the lens of language which guided me as the researcher to focus on the words participants used, what influenced their choices of words, what they told and how they told it. The lens of context assisted me to obtain a greater understanding of participants' experiences and how these experiences were influenced by the context in which they took place. In my research, the contexts included that of understanding the school environment to the extent that participants could use the language of curriculum, timetabling, academic conventions without having to explain, so that the rhythm of their storytelling was not disrupted. I then prepared these data for analysis by organising them into categories by type of data such as interviews, observations, school documents, photos and visual materials; in respect to the stakeholders these were Ruby, her parents, siblings, and teachers.

The essential framework through which I viewed Ruby when I was her teacher, was as a capable, strong, and determined individual, intellectually superior, but emotionally and socially inept and physically weak. Such previously held beliefs and conceptions or perhaps misconceptions, served as an unconscious bias that had developed naturally, and which challenged the lenses through which I saw Ruby upon meeting her some years later. My understanding of Ruby then and now is essentially the same, but my perception of her experiences in mainstream schooling and how she felt about them in some instances is quite different to how she felt about herself, her self-worth, her connection with friends, and relationship with siblings.

The process of active listening as researcher forced me to ask: who are the characters in the conversation, what are the main events, how am I positioned in the conversation in relation to the participant, and how am I responding emotionally to the participant? This was important as many months divided the analysis and data collection and it was important to reconnect with the participants.

From this process I developed an understanding so that I could ‘re-story’ the narratives into a clear framework (Clandinin, 2007, p.15). This involved transcribing verbal and written stories from Ruby, typing up written notes into electronic forms, scanning and labelling photographs, awards, certificates and school reports. This process of transcribing the interviews was the first step in the analysis, and enabled the development of closeness and familiarity with the data (Davis & Meyer, 2009).

Analysing data using McCormack's Lenses (Dibley, 2011) aligned well with the phenomenological approach for several reasons. It provided a means of managing large amounts of data effectively, and it enabled me to make accessible to the reader the lived experiences recounted. It also supported my role of researcher as an integral part of the research endeavour and enabled transparency, thus increasing confidence in the findings.

This approach to narrative data analysis encouraged me, as researcher, to consider the whole and each part of the story from more than one angle. Murray (2000) describes this as 'levels of analysis' that enable the researcher to show different meanings in stories, but also show how meanings interconnect in and between stories. Each 'lens' guided me to consider every part of the data from one of four different viewpoints including language, narrative processes, context and specific moments in time. Each revealed a different aspect of understanding, and when combined into an interpretive story, revealed a contextual, rounded perception of the story's message.

In reading the transcripts, I identified different narrative processes by labelling them as stories, descriptions, augmentation and theories. I worked through this process by locating stories within the transcripts. From these stories I then identified facets of each story that framed the basis for further interpretation; these being the abstract, evaluation, orientation and coda (Riessman, 1993). These facets helped summarise the point of the story, explain why it was told, where, who, what and when, to bring the story to a close. I selected stories that assisted in formulating the most comprehensive responses to the research questions.

The temporal ordering of the stories was linked to Ruby's mainstream schooling experiences and the initial timeline formulated by her as the main participant. The development of the stories continued by revisiting the views highlighted by the different contexts and moments, to see what may need to be presented differently, changed or added. The themes from the initial analysis were then further collapsed into fewer, more dominant narratives.

When analysing the transcript as researcher I needed to consider the impact of language on the interpretation of the stories. Interpretation can be impacted by what is said and how it is said. Interpreting the complex viewpoints of myself as the researcher and the participants relied heavily on linguistic markers that signalled the introduction of new viewpoints or the transfer from one viewpoint to another (Dancygier, 2012). These viewpoints included various types of discourse representation, such as direct and free indirect speech and thought (Short, 2012), but also subtler linguistic elements that give expression to the participant's character, such as verbs of seeing and verbs of cognition (Brinton, 1980).

There were opportunities to identify moments in the transcript that occurred spontaneously during the conversation such as epiphanies or turning points that then impacted the meaning of the story being told (See Appendix E).

These enriched and constructed stories were then returned to the participants to ensure that what I had written made sense, the account was accurate, there were no noticeable omissions or any aspects they wished removed, as well as to invite further comment. This process was to ensure that I reflected the stories as the participants thought they were telling me and that they made sense. I asked them to confirm the accounts of their experience, compare and indicate if I had omitted anything that should be included. From the feedback, I then reflected and responded to the participants' comments, and if appropriate changed or negotiated the stories.

3.7 Report of Findings

Fundamentally, the position I take up in this research is that of story interpreter rather than storyteller (Phoenix, Smith, & Sparkes, 2010). As story interpreter, I am orientated towards standing back from the narrative data and the stories generated in interviews, with the intention of making general and comparative explanatory statements about them, albeit objective. At the same time, however, I hope to achieve some of the storyteller's goals of evocation and engagement with stories, letting them speak for themselves and allowing interpretation to be shown as well as told. As researcher and mentor, my insights are evident throughout the narrative.

In reporting the findings of this study I have utilised narrative discussion, précising in detail the findings from the narrative analysis. The form of narrative discussion I have adopted is one that presented a chronology of Ruby's journey through formal schooling. I presented as much of one particular story as possible, in the participant's own words, along with some interpretive commentary to enable readers to better understand the uniqueness and special needs of a profoundly gifted student.

Content from interview transcripts became the subject of Ruby's gifted journey; a narrative presented in journal form and reflections. The use of first person by Ruby and other participants, engages the reader on an emotive level as well as an educational level. As Ruby's recollections of her past deepened, in both detail and feeling, the transcript leant itself to unfolding into *her* story. Some of Ruby's past nuances were added, in order to set the tone and better recount the uniqueness of her experiences as a profoundly gifted student in mainstream schooling.

I acknowledge that my past experience with the participant as educator and observer as well as twenty-five years in gifted education, may have created bias in predetermining data. To ensure that the findings were not a product of my prejudices I recognised the need to first identify my personal presuppositions, and when analysing the data was conscious of setting them aside.

I accede as Researcher, that my personal familiarity with the experiences of the main participants potentially impacted all phases of the research process; collecting data via interviews, analysing and making meaning of the data, as well as in drawing conclusions. The challenge I faced was how to use my own experience, which offers intimate familiarity and hence potentially deeper understanding of the phenomenon, and at the same time, not impose my experience on the participants, particularly Ruby. To do this I utilized bracketing which is the process of holding assumptions and presuppositions in suspension to improve the rigour of the research (Tufford & Newman, 2010). Bracketing required me to remain neutral with respect to belief or disbelief in the existence of the phenomenon (Streubert, Speziale & Carpenter, 2003). This allowed the 'truth' to show itself and determined the trustworthiness of the results. I was able to achieve this throughout the study process by writing a personal journal to identify my own cultural, social and academic experiences. This assisted me to unpack events and personal interpretations that have shaped my academic life and essentially allowed me to be overt in my own assumptions (Ahern, 1999). The maintenance of a journal assisted my ability to sustain a reflexive stance particularly in respect to my role as the researcher and in regard to my prior assumptions. I was able to explore my own assumptions and preconceptions in order to set them aside, so that they did not interfere with the information given by the participants particularly Ruby. I made a conscious effort to reserve judgement and remain impartial by actively reflecting and remaining as the curious bystander.

Carrying out this research, I recognised the need to be driven by what I wanted to know, not by what I already knew. I was in a good position to deliberate, comment and reflect on the larger meaning of the data, and how this contrasted and compared with the literature. Secondary data sources were also utilised to provide further clarification and credibility to the participants' stories.

When reporting on the findings, I identified consistencies in Ruby and other's experiences, providing multiple perspectives. I collected data from different individuals including Ruby, her family, and her teachers. By examining all information sources, I

aimed to ensure accuracy due to the data drawing on multiple sources of information, individuals and, or processes.

Due to the sensitivity of the data, I paid particular attention to ensure interpretations were fair and representative (Altrichter et.al., 2008). When I drew conclusions from the data, I invited Ruby to comment and provide feedback, which was incorporated into the analysis alongside my interpretations. I aimed to represent the complexity of Ruby's life and experiences by creating a research text that demonstrated the complex and multi-layered story of her schooling experience.

The title of each narrative (e.g. Musical Chairs) or excerpt is reflective of the numerous and various themes arising from the data, as well as representative of Ruby's experiences throughout her schooling life as a profoundly gifted student. The titles also serve to elicit some curiosity in the reader as to both the surface and deeper issues confronted by Ruby.

Themes were selected based on experiences that strongly shaped Ruby's character traits and behaviours, both in and out of school, as well as standing out as thematic considerations for gifted and talented individuals. These themes portray and communicate the authentic insights and true nature of Ruby's gifted experience as described and understood subjectively by her.

Prevalent and recurring themes pertaining to Ruby and largely indicative of exceptional learners' experience include: determination to excel and achieve, aiming for perfectionism, striving to be the best, the need to be in control, intrinsic pressures, isolation, sense of responsibility, heightened sense of empathy, a desire for social justice, and the impact of teacher efficacy. Such traits underlie the essence of Ruby; her individualism, her pragmatism, her drive.

Ruby's narrative is presented as short stories; not so much individual chapters but a continuance of Ruby's experiences that together form a holistic account of her journey.

3.8 Limitations of the Study

This research relies predominantly on information reported by Ruby, the main participant. This may have led to distortion of data recalled, due primarily to the lapse of time involved, and hence the true recounting of her experiences. The use of visual and written prompts elicited her memory, and Ruby was able to recall her stories and experiences fluently (Clandinin & Connelly, 2000). In the interviews with Ruby (August 2016), both written and visual prompts were included. These were in the form of journal entries and photographs from school events. When interviewing Ruby's mother (November 2016), school reports from year six to twelve were used to prompt memories of past teachers, extra-curricular activities, events, achievements and milestones.

Given the fact that this is a narrative enquiry, with collaboration between Ruby and myself, there was a significant challenge in determining how much of the participant's voice to include and when to interrupt that voice with commentary and analysis.

Another perceived challenge, was that, as Ruby's previous teacher and mentor for five years, I needed to ensure data collected contributed to explanations or interpretations presented. When reviewing the rich data, I constantly confronted my own opinions and prejudices (Bogdan & Biklen, 2007) and ensured that the data represented were valid and reliable.

Selecting the narrative approach limited the study, due to the additional time being required for data analysis compared with quantitative approaches, and the possibility of findings being influenced by my own idiosyncrasies and biases.

To resolve these, I constructed an appropriate timeline to enable the volume of data analysis to be accomplished by a certain time. The timeline enabled me to manage the workload and acknowledge progress through the process of transcribing the data (See Appendix D).

Constant reflection on my identity, sense of voice, perspectives, assumptions and sensitivities was achieved by sharing qualitative research findings with all the

participants. This is an important methodological, moral and ethical procedure, intended to enhance the credibility of the study.

3.9 Truthfulness and Ethics

Trustworthiness or rigour of a study refers to the degree of confidence in data, interpretation, and methods used to ensure the quality of a study (Pilot & Beck, 2014). To ensure reliability in qualitative research, examination of trustworthiness is crucial. Reliability and validity are conceptualized as trustworthiness, rigour and quality in qualitative research (Rolfe, 2006). Minimising bias and increasing my truthfulness was achieved by providing transparency through the explanation of the purpose and process of research steps, and progress of documentation with the main participant Ruby. The perception of events as understood by Ruby, and myself as the researcher aimed to capture these truths with methods that allowed all participants to contribute to the story (Bailey & Tilley,2002).

Clarifying and revisiting this qualitative research with Ruby ensured the narrative was credible or believable from her perspective (Farrelly, 2013). This involved providing a copy of the transcript to Ruby to read and approve before it was to be considered for the analysis stage. There was constant, open dialogue between Ruby and myself in which we negotiated the meaning of the stories by validating the data throughout its collection and analysis (Creswell & Miller, 2010).

Employing multiple data collection strategies ensured that I supported my findings, and assisted with minimizing my biases. Strategies to achieve this included interviews, written questions, journal reflections, school documentation and photos. These different approaches allowed scope for spontaneity and consideration in answering.

Trust was based on a well-founded relationship between Ruby and myself. McLeod (2002) argued that morally sound relationships flourish when the basis for their trust is disclosed. Trustworthy behaviour required me as researcher to exercise discretion throughout the research process so that Ruby felt supported and protected when she

shared her knowledge and experiences, tapped into her inner reflections, and created her sense of self.

Trustworthiness (Mishler, 1986), which Johnson (1997) described as defensible, establishes confidence in the findings (Lincoln & Guba, 1985). Connelly (2016) discussed how trustworthiness ensures that transferability, credibility, dependability, and conformability are evident in qualitative research. In this research, I have addressed all four criteria of trustworthiness and they are discussed below.

Transferability has been achieved with a comprehensive account of Ruby's experiences in which I communicated in context the patterns of cultural and social relationships (Holloway, 1997). This may be particularly useful to others in similar situations, with similar research questions or questions of practice. In essence, I am attempting to provide readers with evidence that the research study's findings could be applicable to other contexts, situations, times, and populations. As the researcher, I cannot prove that the research study's findings will be applicable, but that the evidence could be applicable.

Dependability has been established through ongoing, extensive external audits by my university supervisors who examined both the process and product of my research.

Credibility is apparent in the study due to prolonged engagement with the participant to develop her trust and rapport which facilitated understanding and a co-construction of meaning between myself, Ruby, her family and past teachers. Ruby's stories were predominantly based on memory. Lincoln and Guba (1985) discussed the importance of validity/credibility and researchers having prolonged engagement with the participants, and in this case, I have had over ten years' engagement with the key participant Ruby, and was able to validate stories she told.

Negative case analysis (Mays & Pope 2000) involves searching for and discussing elements of the data that do not support or appear to contradict patterns or explanations that are emerging from the data analysis. In this research, through negative case analysis I recognised the need to revise, broaden and confirm patterns emerging from

my data analysis. Throughout the research process, I endeavoured to incorporate member checking to ensure participants had the opportunity to correct errors and challenge what were perceived as wrong interpretations.

In order to demonstrate confirmability, I ensured the findings of my research were framed by Ruby and not by my bias, motivation or interests. To demonstrate this, I established reporting information in the form of log books, notes and recordings, which provided an audit trail with transparent descriptions of the research steps I took from the start of my research project to the development and reporting of my findings. The utilisation of immersion and crystallization of the data (Ellingson, 2009) assisted me to identify patterns and claims that emerged which were meaningful, well-articulated and substantiated.

Narrative research is usually carried out with marginalized populations (Goodley, 1998) and in this case an individual. Not much is known about profoundly gifted students by mainstream society and for this reason narrative inquiry was useful for describing the life and experiences of one such student. In conducting my research, I identified and interpreted the ethical guidelines to suit the context of this particular research. Sieber (1993) noted that ethics involves 'the application of moral principles to prevent harming or wronging others, to promote good, to be respected and to be fair' (p.14). Therefore, it was imperative to take into account the effects of the research on Ruby as the main participant, and act in such a way as to preserve her dignity. It was important therefore to consider ethical issues in doing this type of research since Ruby, her family and past teachers were entrusting me with their personal life experiences, which at times were very sensitive. Stake (2000) noted that researchers have to adhere to fundamental ethical obligations, such as, informed consent, privacy and confidentiality, honesty and accuracy in data and cultural sensitivity. These ethical obligations were revisited throughout the research process.

As part of informed consent, permission was sought from participants before data collection. The data collected remained confidential and was not shared with individuals outside the study. The participants' identities remained confidential. Personal and

private information gathered from them was presented in such a way that it could not lead readers to deduce their identities. I used alias names in the data transcripts and throughout the research report.

In keeping with the authenticity of the original place and space, interviews were conducted at the two schools Ruby attended. Interviewees included her past teachers, mentors, and counsellors, with the impact on their time being minimal. I made numerous visits to the schools due to the number of participants involved. I interviewed Ruby and her family in her family home. Data collection spanned over a time period of four years. Communicating the purpose of my study to relevant personnel on site minimised reservations about my attendance there. Information was also gleaned through emails, Skype calls, journal entries and past school documentation.

It has been particularly important to communicate to Ruby the overall purpose of the study and the main features of its design, and to inform her of any possible risks and benefits from her participation in the study. McDermid, Peters, Jackson and Daly (2014) noted the importance of the researcher emphasising the participant's role and their right at any stage to withdraw without consequences or explanations. The participant was informed that she had the right to withdraw from the study at any time. Had this been the case, given the nature of this particular study, it would have been difficult to continue. Ruby gave consent to publish whole or parts of the study when it was completed and approved.

The following permissions to carry out this study were sought and gained from:

- the principals of relevant schools and
- Flinders University's Social and Behavioral Ethics Committee.

3.10 Informed Consent

In terms of informed consent, participants had the right to make an informed decision and to hear a full explanation of the study. Information was transparent to participants because it was available in appropriate accessible formats and was never deliberately withheld.

Before commencing the research, all participants were fully informed about the nature, purpose, duration, method, potential benefits, possible risks and consequences of the research and they all provided their informed consent. Once individuals opted into the study, a consent form with the purpose of the study, research methods, time commitment, and other details were shared with them (See Appendix C for Participant Consent Form). The main research questions and interview questions were included with the consent form (See Appendix D for Interview Questions).

Throughout the research process I undertook to make all research folders and files viewable to the participants through Google documents. The participants were also provided with an information sheet on the study which was sent by email with a read receipt notification attached, so they did not feel obliged to participate.

Chapter 4

Results

4.1 Introduction

*"Human beings are storying creatures. We make sense of the world and the things that happen to us by constructing narratives to explain and interpret events both to ourselves and to other people." (*Sikes & Gale, 2006, p.1)

This chapter covers the qualitative research findings from the narratives of the main participant Ruby, her family, her educators, including myself.

Ruby's 'story' is an experience or collection of experiences shared by herself, her educators, and family members, documenting her personal journey as a profoundly gifted student throughout her formal schooling. As the main participant or subject, Ruby's authentic voice of experience is revealed through narrative reflection.

The title of each narrative is representative of the themes or key issues arising from the data, and accompanying quotations have been provided as a reflection of Ruby's personal journey. Ruby's voice is presented in italics throughout.

Key themes are demonstrative of 'considerations' or issues which Ruby faced consistently from the inception of her schooling and throughout, and which proved unique to her. As a result of her giftedness Ruby was an individual and student with special needs, which shaped both her experiences and the experiences of those around her.

Prevalent and recurring themes pertaining to Ruby and largely indicative of exceptional learners' experiences include; determination to excel and achieve, aiming for perfection; striving to be the best; needing to be in control; feeling intrinsic pressures to achieve; feeling isolated; carrying a sense of responsibility; experiencing a heightened sense of empathy; desiring social justice, and feeling the impact of teacher efficacy. Such traits underlie the essence of Ruby, her individualism, her pragmatism, her drive.

The order of presenting the themes in the narrative were not necessarily representative of their order of occurrence nor their weight or importance. They were commensurate with Ruby's story as it unravelled and developed, with some themes acting as foundational to her experiences and others arising intermittently.

The participants collaborated with me to check the content and validate the accuracy of my telling of the stories. To remain objective as researcher, mentor and past teacher, I present stories where possible in the participants' own words to avoid interjecting any bias or filtering their thoughts, feelings, or reflections. Whilst the integrity of participants' recounts remained intact I was granted the creative licence by participants to reinforce the true nature of their experiences through personal reflection in narrative form.

My goal is for readers to immerse themselves in the participants' stories, which come together to create the picture of Ruby's experience as a whole, and with each narrative identifying isolated and recurring themes.

For the purpose of this study, the participants were given pseudonyms to ensure confidentiality.

Ruby - main participant

Ruby's parents - main participant's parents

Mrs. C - Year 2 Primary School Teacher

Mrs. G&T - Primary Cluster Gifted Coordinator

Mr. T - Head of Mathematics Middle/Senior School

Mrs. R - Head Music Teacher

Ruby's sister - main participant's sibling

Mr. P - Senior School Physics Teacher

Mrs. H - Middle School Humanities Teacher

RUBY'S STORY

Understanding Giftedness

(Ruby's parents, Interview September 2016) 'Ruby's transition from home to her first formal independent social context was a challenging time. She was our first child starting school and we were challenged right from the beginning. Ruby was not conforming, her behaviour was challenging and confusing for teachers. She had regular outbursts which isolated her from her peers. She displayed intense anxiety and frustration, behaviours that had not been demonstrated in such extremes at home. She could read well before school, but we did not teach her, she just started reading on her own. My husband and I knew she was bright, but it was her ability to manipulate numbers that caught our attention first. Her language was developed by the age of two when our second child was born. She would ask an enormous amount of questions and 'Why?' became her favourite word. It could be very tiring and relentless and whilst we ourselves were looking for answers… coming up with answers for her was more important.'

Here is Ruby's story…

'I was only five. Physically tiny for my age, I was an intellectual wonder.'

(Ruby, Interview August 2016) *When I think back, I am not sure what people who didn't know me thought about my giftedness (perhaps they thought I had a condition), and what impact it had on my parents. I remember Mum and Dad getting 'looks' from people when we were out if I happened to misbehave. But I couldn't help it. I would scream when I felt frustrated and I often felt frustrated. The first few weeks of school for me were overwhelming… I had gone from being home with Mum all day, everyday, to being thrown in with my peers who I couldn't really relate to.*

I could not understand 'how' my classmates were thinking, and they could not understand how I was thinking, so I wasn't mature enough to act 'normal' at the time. I was in reception, my first year of Junior primary and already I was considered a subject of sorts… to be analysed and surmised and probably criticised. Why did some adults

assume to know what's going on inside my head… how could they, when I didn't even know.

From my exposure to Ruby throughout her schooling as her teacher and mentor, I could see that she was aware that her exceptional natural ability meant advanced thinking, but she did not always know how to understand and communicate this. Ruby was viewed as an intense little girl and her outbursts as an expression of her frustrations. She recalls that when she started school, she felt different.

Although Ruby had the intellectual ability to recognise and acknowledge the impact of her giftedness on others, both parties were equally frustrated in the failure to 'understand' one another. This was most often the case with her peers and educators, rather than her immediate family members, perhaps because they knew her best. Gross (2006) found that gifted children were often further along in the stages of friendship development than same age students not assessed as gifted. For Ruby this meant that instead of looking for playmates in kindergarten she was looking for close and trusting relationships which she often found in teachers and mentors.

(Ruby, Interview October 2016) *I spent a considerable amount of time with my mathematics mentor in primary school. I looked forward to seeing my mentor and discussing concepts that I couldn't with my teachers and peers, it excited me, it made me want to come to school.*

EXCEPTIONAL TALENTS

Celebrating Difference, Being Unique

I was a little out of rhythm and I liked it.

(Ruby, Interview July 2016) *I probably realised I had a gift when I first started school because mathematics, reading and writing came easier to me than the other kids. Mum and Dad helped explain that everyone handles things at a different speed. I'd complete the tasks quickly and I wouldn't have to really think about it, so I was very bored. Then I realised that the other kids were having to think about what they were doing. I rarely had*

to listen to the teacher as I could learn most things myself by imitation, while everyone else needed to listen. So I knew that was different.

(Ruby, Interview July 2016) *By Year 2, teachers were discussing possible extension activities with me. Mum gave me a book about gifted children so I could read myself about what I was. I remember it wasn't framed as a positive thing and this worried me a bit because I didn't want the problems to outweigh the benefits of me being a good student.*

I, along with a small number of other Year 2/3 students were nominated by our classroom teachers and the Students with High Intellectual Potential (SHIP) coordinator to be 'tested'. I never got told the results but they explained to me that I was 'unusually' gifted. I wondered what was so unusual about it. Perhaps it helped explain something to me about why I felt different to most other kids my age.

I felt like I saw a lot more connections between things than other people could. Like, when learning a new mathematics topic, the first thing I understood was the underlying concepts, and then I discovered how and why they are used, and then finally I would ignore most of that and copy down the textbook example so the teacher could mark me easily. But I'd always have that first-principles understanding to draw upon for problem-solving. I would connect really separate stuff, things from different subjects and outside of school, and I'd analyse it almost subconsciously. I felt like I could see the consequences of events and my actions more strongly than others.

Having been identified as mathematically gifted it seemed I required 'intervention' in order to be accelerated in mathematics. Thankfully this meant I was grouped with other like-minded kids and it wasn't solely me who was relied upon for the ideas and the answers. I wasn't sure of their level of giftedness though, just smart perhaps.

Mrs. C my Year 2 teacher spoke with me about my progress and my preferred areas of focus in class. I was happy she felt that even at age seven I was able to make my own choices about my schooling. I knew I was unique… so the only real 'expert' in what I

could do was me. I also wanted to make decisions myself so I could be my own person and not a stereotype defined by what adults thought about my gifts.

I didn't mind being physically small… it kind of kept me young when my brain was so advanced which made me appear older. That way also, people didn't really expect me to be more socially and emotionally intelligent than my peers, because I still looked so little.

(Ruby's parents, Interview September 2016) 'As Ruby's parents, we were conscious of not subconsciously holding higher expectations for her academic and otherwise. In a way Ruby's physical size combatted that, and I guess in a way we wanted to keep her young or at least her age.'

(Mrs. C, interview, October 2016) 'There were times when I was concerned Ruby wasn't cooperating in class. I felt it best at this stage seeing as she was still so young to speak to her parents for support as they best understood her.'

Mum and Dad weren't happy with me… they said I needed to stop acting up and get things under control. I wasn't sure if I knew how to do that at the time.

In Year 2 I won my first prize for writing and illustrating a picture book. After that my parents and teachers treated my giftedness as an advantage, not a problem.

Ruby's development was asynchronous in the social, emotional, physical and cognitive domains. Asynchronous development indicates uneven maturity of an individual's emotional, social, cognitive, and physical growth (Silverman, 1997). Unique interventions were required of the school to address her developmental and educational needs. A significant research base demonstrates that gifted students experience social difficulties if they are not provided with interventions to accommodate their asynchronous development (Bailey, 2009; Daniels & Piechowski, 2009; Karnes & Stephens, 2008; Silverman, 2009).

Being *different* was something that Ruby embraced; her physical size, her exceptional ability, her uniqueness, her special needs.

ALL THINGS AWKWARD

Special Needs, Belonging, Celebrating Difference

'I recall going home from school that day worried that I had a special need.'

(Ruby, Interview July 2016) *When the 'gifted' program was finished, I remember Mum paying my teacher Mrs. G a little visit to thank her. (I called her Mrs. G&T, the other kids just called her Mrs. G). I also remember overhearing parts of their conversation. It went something like this…*

'Oh Ruby is a delight! She's so motivated, whatever activity I come up with she is eager to explore ideas.' Mrs. G&T assured.

'But what about her interaction with the other students? Is she able to relate to them, I mean do they talk?' Mum had innocently queried.

'You don't have any worries with Ruby there, she is highly articulate.'

'Yes I know, but I'm talking about her social skills, she's not a little awkward?'

'We are aware of that, but don't worry Ruby is gifted, she'll work it out!'

'Yes but I am a little wary of the 'gifted' label, and what it means for her social interaction? 'Oh they're not just labels; Ruby's exceptional talent is also a special need!'

(Ruby, Interview/Journal July 2016) *I recall going home from school that day worried that I had a special need. Mum and Dad on the other hand had a different worry, and spoke to me about how I felt when I was around and interacting with others. I remember the word 'awkward' being used. They asked me if I ever felt awkward… socially.*

Maybe this had something to do with my sleeping… or 'not' sleeping I should say. Sleep for me didn't come naturally. Actually sometimes it didn't come at all… and I would find myself tossing and turning, wriggling and writhing. My mind was just always so active. I couldn't switch off.

There were also times I felt like the giftedness thing was turning into something I couldn't control, and that I was displaying symptoms to be diagnosed. I remember the day 'It all made sense!' to Mum and Dad; that Uncle... was 'socially awkward' because he was gifted too! I knew they meant gifted like me, and which must have meant that I was also socially awkward.

Oh the irony.

Here I was in the eyes of my peers, so far advanced, so intellectually superior, so adult… yet I was no bigger than a small child. I could barely hit the hoop of a basketball ring, let alone find my legs in high jump. But then again I'm not sure my size had anything to do with it. I found any kind of sport challenging and was quite sure my awkwardness wasn't confined to physical pursuits.

I had been told by my therapist that 'giftedness' generally brings heightened sensitivities, and which did often leave me feeling awkward in social situations. So Mum and Dad were possibly right. It was all cyclical… I was small I think from lack of sleep. I couldn't sleep because I was so bright, my intelligence meant I was socially awkward, which made it hard for me to sleep, which meant I didn't grow… and around and round it goes.

I didn't need a trigger to kick-start the activity that was in my mind… I was going to my therapist tomorrow, maybe she could help me more with the sleep thing. I decided to count sheep, and when I was still awake at 512, I took over in Japanese to take me to a 1000. Combine numbers and languages and I was pretty lethal.

I think I'm going to start learning German. I've always been interested in the culture and people. I don't think I ever really learnt Japanese properly at primary school and it would be frustrating going back to the beginning. Yes, I definitely think German, never hurts to have a European language up your sleeve and maybe I'll even visit Europe at some point.

So the social stuff could wait, who cares if I was a little 'awkward', I had work to do. But did this also mean my social skills weren't properly developed? Perhaps what was a

turning point in my education, was that although I 'tried' in my own way (to be like the other kids), my acknowledgement and acceptance of my own awkwardness was reassuring.

As the senior school gifted coordinator, I observed in Ruby degrees of psychomotor, sensual, imaginational, intellectual, and emotional over excitability (Coxon & Chandler, 2014; Dabrowski, 1970,1972, 1973) which manifested into challenging behaviours such as increased awareness, high levels of intensity and sensitivity. In Ruby's case, whilst at times she exhibited elements of oversensitivity, including impatience and frustration with others who didn't match her academically, she had no reality of what it was like to be like the 'others'. Ironically, while Ruby had the intellect to recognise her differences from others, she did not take responsibility for it.

Gross (1993) reported that the majority of students in her study of profoundly gifted students required less sleep than their age peers. This was described by Ruby's mother.

(Ruby's parents, Interview September 2016) 'Ruby was an unsettled baby and as she grew older she continued to have difficulty falling asleep. Her mind was so active; it was like she had a switch that she could never turn off. It frustrated her too, we knew that. She always had questions, too many questions that needed answering. She was reflective and articulate and always needed to make sense of things. We tried many, many interventions to support her through this, including sessions with a therapist, hypnotherapy, music… On the home front, we separated Ruby and her siblings so as to avoid disruption at night, and placed restrictions on her reading times as she would turn the light on or hide away and read for hours throughout the night. In the end Ruby worked it out for herself but it took a long time and over time took its toll on her physical growth.'

Ruby often articulated to me in my role as her mentor, that almost daily her experiences naturally led to her feeling different. The pressure giftedness placed on Ruby was more overt when she was younger, as she lacked the emotional and social maturity to deal with her heightened sensitivities.

(Ruby, Interview October 2016) *I remember when I was younger crying a lot. Not from sadness so much, but out of frustration and anger, it was hard, it was hard!*

Students identified as gifted may not only be considered at risk in terms of their academic needs, but also their physical, social and emotional needs (Daniels & Piechowski, 2009). Ruby was not only small for her age, she struggled in various areas such as: having difficulty in social settings: getting easily frustrated: and being inappropriately critical of others; lacking empathy and awareness of her impact on others, as well as isolating herself from her peers.

Ruby showed disinterest in doing routine or repetitive work, and was not sufficiently challenged by school work meaning she was often bored, and displayed high levels of anxiety rather than depressive behaviour. Ruby could have challenged her teachers but rarely resisted authority or failed to conform. There were many times when Ruby openly admitted feigning engagement in a lesson by asking the teacher questions that she already knew the answer to.

(Ruby, Interview, August 2016) *I already stood out for my differences, I didn't feel the need to alert teachers to anymore.*

Ruby's over-excitability made her stand out from peers, leading her to feel isolated and misunderstood. Because Ruby processed information more deeply, she became more sensitive to her environment. Her emotional sensitivity and empathy made navigation through lunch and recess breaks stressful for her. She often felt that teachers held higher standards for her than her peers, and she found it difficult to accept criticism because she regarded anything short of perfection as failure.

In terms of support, gifted students are not generally considered to be at 'risk' in traditional terms. At risk is defined by Richardson (2008) as one who requires temporary or ongoing intervention in order to succeed academically, with such resources being allocated to students 'identified' as having special needs. In Ruby's case, however it was not so much about her succeeding academically, but to her full potential. Ruby's comments indicate that a broader awareness and greater acknowledgement and

recognition for the special needs of gifted students is essential in order to meet their needs. Expectations and labels can muddy the waters, whilst at the same time diluting the true picture of what it means to identify as gifted.

FINDING MY FEET

Individualism, Isolation, Independence

'No one really sees the world the way I do.'

As the degree of intellectual advancement increases, so does the child's risk of social maladjustment and unhappiness (Clarke, 2009; Hollingworth, 1942; Terman, 1925; Terman & Oden, 1947; Tannenbaum, 1983). Ruby was no different, she acknowledged her struggle between acceptance and achievement and her inability to form close peer relationships throughout her schooling.

(Ruby, Interview August 2016) *My lively internal life considered questions posed in books and TV shows, as I really thought about the characters, situations or themes, but not in a way that would ever get you good 'marks' in English class, just for curiosity and fun. But that wasn't something I'd share with anyone else because it wouldn't be of interest to them... maybe when I get older.*

I felt like a bit of a curiosity among my peers, but not in a way that was always isolating. More like I was a part of the normal school life but there was also a world beyond that I was a part of that they just did not get.

(Ruby, Interview July 2016) *The girls huddled so as not to miss out on the joy a little piece of purple paper could bring amongst them... their eyes lit up when they discovered its contents. I acted as if I hadn't witnessed anything, that I hadn't seen the names of my classmates singled out and hand scribed on yet another birthday party invite, - that I wasn't invited to. Although I was used to being left out, it would have been a wish come true. Yes, there were times when I felt isolated and wanted to be like everyone else.*

Ruby acknowledged the gap in social dynamics with her peers from a young age, however, she was content to extend herself individually and on her own terms. As her

intellect appeared to grow so did the difference in social wavelengths of Ruby and her peers. This did not appear to distract her, however from her key focus, her determination to succeed and her drive to be the very best.

(Ruby, Interview August 2016) *I finally got the opportunity to extend myself a bit and was feeling less frustrated. I had something to aim for beyond mindlessly following along and trying to keep my head down to stay under the radar of my teachers and peers. I got the chance to show people I could channel my gift into something useful such as competitions and debates, and which I think changed how teachers saw me. I went from being perceived as a problem child to a model student in three years, between Year 2 and Year 4.*

I had a chat with Mrs. G&T about the most effective ways to teach mathematically gifted kids. Was that up to me to know? She talked of what constitutes giftedness, the individual teacher's approach and teaching styles, as well as what is required to realise student's intellectual potential. No, I do not think this was up to me.

(Mrs. G&T, Interview August 2016) 'I watched Ruby as she marched across the playground carrying an Australian Mathematics Competition text under her arm. Here she was a nine-year-old full of purpose and belief, handling a huge responsibility with aplomb. Yet whilst most teachers were in awe, there were a few who appeared threatened by Ruby's intellectual superiority.'

(Ruby, Interview August 2016) *In Year 4 I found myself in in Mrs. C's class and she was very very caring of all of us making sure we felt ok about things, not just schoolwork. We focused on our social skills, working in teams, and developing ourselves as a whole person. All things I badly needed. I was already working independently of my peers and often able to work on alternative tasks other than mathematics in this time.*

My primary teachers, like most primary structures were not mathematics specialists. By the time I'd completed primary school, I had completed competition mathematics three years above my age level.

Because Mrs. C wasn't able to fully extend me in mathematics, it was decided I would join the Year 6/7 class as a trial, and to further challenge my skills, knowledge and understanding in mathematics.

I shot up my hand at every opportunity… answering quickly and with confidence. My peers looked in amazement. Mrs. C gave me an algebra activity from the Year 7 textbook and told me to familiarise myself with the concepts before I attempted to grasp them. I 'familiarised', 'grasped', and 'mastered' them before anyone else. I think my classmates were a bit weirded out as they didn't understand how I think or how I got my abilities.

Ruby was acutely aware she was a curiosity to others, and as her giftedness developed so too did her confidence and conviction in the rightness of her approach to learning and achieving. Often coupled with the idea of the simple being complex was the need for extreme precision. Ruby appeared to have logical imperatives related to her complex thought patterns so she always expected the world to 'make sense'. The necessity for the world to be logical resulted in a need to argue extensively, correct errors, and strive for perfectionism in everything she did. Her goal, to succeed at the highest level.

'Finding my feet' is reflective of Ruby finding her place, her groove… even if it was on her own. Being and feeling isolated were common experiences for Ruby and she did not seemingly resist this, at times she revelled in it. This isolation meant she had control and autonomy without the distraction of peer interactions.

SELF DEVELOPMENT

Belonging

That I appeared 'disinterested or bored in class' wasn't sometimes,

but more like often.

(Ruby, Interview August 2016) *What I lacked in social skills in junior primary, I made up for in upper primary. I don't know what it was, perhaps just emotional maturing. Let's just say I felt I fitted in better whenever my gift was not a factor.*

Again my last two years of primary school were spent with Mrs. C. We were being developed as deep thinkers and creative individuals and more importantly to be part of a team. Something it took me awhile to get used to but I liked it.

In Year 6 we were given a task, what's called a Round Table Assessment, a research project with the theme 'Heart, Hand and Mind' where we had to do a presentation about something we were passionate about, using our knowledge and our practical ability. The assessment panel was made up of a teacher, family members and members of the community.

(Ruby, Interview September 2016) *It was really cool! I chose the Adelaide Central Market - for the practical part I collected items from all the stalls I'd talked about and served all these snacks to the panel to illustrate my presentation. I even wrote a poem about it.*

A Feast for the Senses

Tantalising scents waft from the entrance,

Inviting me to join them.

I know what I want

But it's easy to get side-tracked,

In the maze of market stalls.

Everything so irresistible

It's so hard to choose

Awash in a sea of colour and noise

Trying everything,

Buying everything.

A croissant,

Oozing melted chocolate.

Strong,

Bitter,

Perfect.

A sausage,

Dripping with taste,

Making you drool.

Everywhere you turn a new, delicious sensation.

A celebration of difference.

Flavour in all its forms.

A feast for the senses in a world of its own,

The Market in the heart of Adelaide.

(School Publication: Ruby Aged 12, July 2004)

(Ruby, Interview August 2016) *Parent teacher night - Mum and Dad met with my teachers to get the lowdown. It was the same every year and went something like this:*

- *Ruby is highly articulate but very emotionally tense, which often makes her over excited and she speaks more quickly.*
- *Ruby sometimes appears disinterested or bored in class…*
- *Ruby is extremely talented at Maths, but she never shows her working out and is not flexible in her approach.*
- *Ruby can be easily distracted in class, but at the same time she demands more attention, time, and resources than anyone else.*

- *Ruby can be a good help to her peers… but doesn't appear to have any close friendships in the class.*

- *Ruby prefers to work on her own rather than in groups, she gets very frustrated when working with others and can be quite abrupt as she is not entirely in control of the final product.*

(Ruby, Interview August 2016) *My teachers and their comments weren't focused so much on my natural ability, because that was a given. It was more about my ability to adapt and my need to extend myself. That I appeared 'disinterested or bored in class' also wasn't 'sometimes', but more like 'often'.*

Nothing I didn't know. But then…

From Art Costa's 16 Habits of Mind, one was missing, one!

'Finding Humour'!

I am not sure how pivotal to my learning it was, but my teachers felt it pivotal enough to mention it!

I looked it up… to be exact.

'Finding Humour: Willing to laugh appropriately; Look for the whimsical, absurd, ironic and unexpected in life; Laugh at myself when I can.' (www.artcostacentre.com)

Great, so now the experts don't think I have a sense of humour... something else for me to work on. Why did I need to laugh at myself? Maybe to prove I was really 'human'.

OUT OF CHARACTER

Competitiveness, Heightened sense of empathy, Desiring social justice

'People are adept at believing they know more than they do.'

(Ruby, Interview July 2016) *Year 6 saw me really tapping into my creative juices. In the Festival Choir I was given a lead role singing. I played viola in the Festival Orchestra, and took on an acting role in a drama performance performed at Her Majesty's Theatre.*

(Ruby, Interview July 2016) *I also loved learning about and writing poetry. I recall Mrs. C. challenging us to visualise ourselves as an animal, one whose traits represented us. I wasn't quite sure at first, I couldn't encompass all of me into just one animal, but then it came to me…*

Formidable I set forth seeking adventure

Hunting capturing devouring

Feasting on prey thirsting for more...

Fiery and slick

Loyal to the lay of the land

Over rugged terrain amid the elements I go

Luring leading into my den

I am the fox.

(School Publication: Ruby Aged 13, December 2005)

(Ruby, Interview July 2016) *Mrs. C remarked that I used sophisticated language to effectively convey the symbolism of my chosen animal. Although I had always been a numbers girl, and the creative bit wasn't really my thing, I started creating movie clips using images and music to share my poetry. Mrs. C's feedback further challenged and inspired me to enter a poetry competition. I won the poetry prize.*

Today we had a new student arrive in our class. She was extremely shy socially and I had a feeling this translated to her academic confidence and ability also.

Oh but how dare I! Making assumptions about her, the very thing I hated people doing to me. I felt sorry for her. Yes, making assumptions, forming judgements, casting stereotypes… people are adept at believing they know more than they do.

In my experience as Ruby's teacher and mentor, her identification with a fox exposed some interesting personal traits that she acknowledged, but which may not have been so obvious to people around her. Her teachers at the time, however were perhaps more privy than she realised, with the cunningness of a fox being representative of Ruby's natural competitiveness, and her perceived slyness and aloofness more indicative of her calculated approach in attaining greatness. Ruby's quest for knowledge and learning was her prey, devouring it, thirsty for more. The rugged terrain her obstacles.

Ruby's immersion into the creative arts, either deliberate or by default, saw her move out of her comfort zone, allowing for a different form of exploration, expression, and experience. Whilst there were no formal marks attributed to her performances, Ruby 'performed' with the same zeal, as she did with anything that became her personal responsibility. The traits that may have appeared out of character for Ruby were indeed her very true nature.

PEER SUPPORT

Living Up to Expectations

'We were all trying, just in the way we know how.'

Mrs. G&T, the SHIP coordinator and mentor, reflected on her years with Ruby.

(Mrs. G&T, Interview July 2016) 'Ruby exhibited a heightened state of empathy. She was constantly aware of being very different from her peers and well beyond them intellectually. Although the school had a strong Gifted and Talented Education (GATE) program with very able students, I did not really feel she truly connected with them. There were two other female GATE students who whilst academically gifted were also

very talented in sport and music. They demonstrated empathy and most of all understanding for Ruby, and took her under their wing on many interstate trips for academic competitions and school exchanges. Ruby found empathy and compassion as worthy states of being, however I found in my experience her empathy tended to be offset by justice seeking. Ruby was often likely to stand up for others, or if required for herself.'

(Ruby, Journal August 2016) *Today our class practised our performance for the story dance competition, a National Story Sharing Arts Festival for primary schools. We split into our groups with Mrs. C putting the new girl with us. She was given a small part but appeared dreadfully uncomfortable and like she couldn't be bothered.*

Performance - practise lesson again. Mrs. C was getting impatient with the new girl who just couldn't comprehend what was required of her, or perhaps she was just choosing not to. I'm pretty sure it was the former.

Performance - our last practise. Mrs. C's patience was really wearing thin with the new girl, who just couldn't deliver what was being asked of her. So Mrs. C made an executive, but I felt rash, decision. The new girl wasn't going to be 'required' in the class play. I'm not sure if she was more relieved or embarrassed but I felt sorry for her because I felt she must have been misunderstood.

I stayed after class and spoke to Mrs. C as I felt very strongly that the new girl should be included despite not in her eyes 'trying'. We were all trying, just in the way we know how. I suggested (ok it may have sounded a bit more like arguing) that the new girl should still be part of our performance but perhaps in a different type of role, like with props or costumes where she may feel more comfortable. I mean sure, it is healthy to get out of your comfort zone every now and then, but some of us don't even know what our comfort zones are. The new girl and I were very different and that was ok.

Actually, perhaps we are not that different after all.

I need to train myself to switch off my imagination. It is interfering with my sleep. Nothing really too special, just can't stop thinking about things… books, TV shows, past

projects, current projects, future projects. I wanted to assume one of the characters from my books… safer that way… to pretend for a little while…

It was the day of the performance. We were all pumped, including the new girl who delivered in her role as costume changer brilliantly. She was now an 'old' girl.

I was later congratulated for delivering a mesmerising performance playing the role of a monkey in the story dance performance of 'Jungle Fever'. Whilst I was on a high, something else was now bothering me.

I spoke to Mrs. C, annoyed that other schools had not taken on the true philosophy of the dance competition, and that we should be acknowledged for a student-created performance because it was all our own ideas, (ok a lot of which were mine, but that wasn't the point). I hate apathy.

Whilst Ruby set high standards for herself and others, she was able to differentiate between sincerity and motive. Her sense of empathy and justice often led to conflict with her teachers and peers. Ruby would often debate with a teacher if it seemed they had demonstrated inconsistencies in their approach to discipline and assessments. She would often be heard taking the teacher to task if she felt there had been some form of injustice. Consequently, Ruby was a champion debater!

Oakland et.al. (2000) noted that gifted students have more active imaginations when compared with the average student, and gifted girls are twice as likely as gifted boys to prefer imagination to practicality. This held true for Ruby, her active imagination kept her awake at night and may have contributed to her inability to sleep. She did not see her imagination as a negative aspect but rather a way to escape into her own world.

IN ALL FAIRNESS

Frustrations, Empathy and Justice

Participants involved in telling Ruby's story commented that from an early age Ruby had strong concerns about moral and ethical issues, including fairness on the playground, the lack of respect amongst her peers, and adult concepts such as environmental degradation, extinction of animals, medical conditions, and war related incidents.

At one stage Ruby was particularly concerned over the availability of Smith's crisps in the school vending machine because they contained palm oil. She called for a boycott of the product, much to the annoyance and resistance of her peers who did not share her sense of responsibility nor sentiment.

She was also an independent thinker and regularly appeared critical of and impatient with other peers who could not sustain her intellectual pace. This meant Ruby had difficulty connecting with other students and therefore making friends in her class. In Science class for example, Ruby was reluctant to do group laboratory work as she feared a collective result would not be an accurate reflection of her individual ability and contribution.

Ruby demonstrated what is referred to as over-placement where she had overly positive perceptions of how she compared with others (Moore et al., 2008) which often translated into what was perceived as displays of arrogance with her teachers and peers.

Ruby's seeming arrogance often impacted on her peer relationships when she set unrealistic expectations of others, particularly students her age who were not as 'gifted'. She often became frustrated when working on group projects and conflicts arose when she was unable to understand why her fellow classmates were not able to contribute at a level that was acceptable to her. At times she would refuse to work in groups because of her inability to control the final product and possibly her grades.

(Ruby, Interview July 2016) *I preferred partaking in competitions that relied only on me. Working in a team was just too risky… I couldn't control what other people did and hence the result.*

Ruby's need for action and her natural propensity to take the lead, often resulted in frustration around inaction, making group work difficult. Her perception that her peers were not contributing at the same level as her she interpreted as a sign of incompetence, and hence she wanted complete control of an outcome by doing it herself.

A NUMBERS GAME

Academic Provisions & Living up to expectations

(Ruby, Interview July 2016) *I don't really remember much about Year 8 mathematics, we had an extension class but the work we did wasn't that extended. We still had to cover the curriculum, most of which I'd already done at primary school. I think I put my violin lesson during mathematics as it was the best subject to skip at the time. By the end of the year we'd decided I would skip to Year 11 the next year. I spent a term working independently on the Year 10 textbook getting up to speed. From Year 9 on I took it a lot more seriously. Year 11s had to take two subjects worth of mathematics to be eligible for Mathematics Studies and Specialist Mathematics. To avoid having to re-learn material after a year's break, I did one half at a time as follows. This worked well and actually prepared me better for Specialist Mathematics, I think, as I wasn't doing any courses that depended on each other concurrently.*

As Ruby's teacher and mentor I evidenced an apparently seamless transition throughout her schooling to advance in her studies at an expedited rate, with Mathematics in particular a natural strength of hers.

All the models for the education of mathematically promising students stress the importance of providing students with appropriately difficult work so that they may realise alternative approaches when coping with questions (Davis & Rimm, 2004). Building those mathematical connections to broaden the student experience and

resilience in a sense, is a common principle among mathematics education programs for all students.

Though these principles are core theoretical elements in the education of the gifted, teachers' knowledge and beliefs pre-determine their ability to incorporate these principles in their classroom as well as their willingness and enthusiasm for teaching high-ability students (Videgor, 2015).

Mills (2003) suggested that teachers who are considered to be highly effective in working with gifted students prefer abstract themes and concepts, are open and flexible, and value logical analysis and objectivity. Additionally, teachers' personalities and their cognitive styles may play a role in their effectiveness in teaching gifted students. Karp (2010) noted that it is highly desirable that a teacher of mathematically gifted students has a profound mathematical knowledge far beyond the curriculum.

A challenge for both me as a teacher and the traditional school structure, was in timetabling Ruby into mathematics classes in a middle school International Baccalaureate Program, whilst linking with the program teachers who had extended mathematical knowledge. Quite often in middle schools, the structure supports a strong pastoral philosophy whereby teachers deliver at least two different subjects to the same students. This resulted in Ruby having the same teacher for Mathematics and Science in Year 8 and the same teacher for History and English. Ruby's Year 8 mathematics teacher was indeed a specialist science teacher with limited mathematics teaching. As academic expectations appear to progress with year levels, from generalist teachers, to subject specific, to more specialist teachers, being equipped to teach at the level of 'gifted' is not a given.

Such an arrangement or expectation poses the risk of teachers feeling inferior or intimidated, if it is deemed they are not sufficiently equipped to adequately or fully educate their students. This is as well a reflection of the school's ability and responsibility to provide the necessary further challenges for gifted and profoundly gifted students, as well as to prepare educators to fulfil their roles.

Ruby had a vested interest in knowing the people on her team were up to the task in enabling her to achieve to her full potential. She relied on teachers and her parents to advocate and accept her alternate pathways. Such an arrangement gave Ruby greater stability and confidence in knowing she had the foundations in place to greater assist her in achieving her goals. For profoundly gifted students, challenges within intellectual, physical and emotional development may require the additional allocation of resources to address asynchronous development.

WORK IN PROGRESS

Social Justice, Frustration, Individualism, Teacher efficacy, Independence

'Thank you for challenging my thinking.'

(Ruby, Interview July 2016) *By the time I was actually in Year 6 and 7 this meant I'd already covered the content, so again I was doing my own thing. I did the Mathematics Challenge and worked through an Australian Mathematics Competition textbook. I also had a tutor come in weekly to extend my mathematical thinking. I think I also had a Year 8/9 textbook I worked through, although a lot of the time I used mathematics lessons to catch up on work I'd missed for other stuff.*

I passed the Music and Art rooms and peered inside at the lucky pupils who could spend their afternoons playing and creating. I played the viola, and even though it was not one of my strengths, there was no time in my busy academic schedule to fit in practice. Maybe ironic too considering my mother was a music teacher.

The last week of school for Year 7 was both exciting and a little strange for me, as even though next year I was going into Year 8 and a new school I had already covered most of the work (at least in mathematics anyway...)

But more importantly, was our class Secret Santa draw. "Twas the season to be jolly", but the whole thing had been compromised and we hadn't even started. I hung around after school a little longer than normal just to see and express my concerns to Mrs. C. It took me over fifteen minutes to convince her that the Secret Santa needed to be redrawn because some children had not kept the names secret. She presented very

valid points as to why we would not redraw, and whilst it was hard to accept her decision I did. But on principle it was killing me.

Year 7 Graduation night - My final acceptance speech receiving several academic awards. I reveled in the spotlight recalling moments, epiphanies, and lessons from my time in primary school and the significant and positive impact particular teachers had on me. 'Thank you for challenging my thinking.'

And then it was Mrs. G&T's turn to recall her highlights, moments and lessons of the 'more challenging' students she was fortunate to have cross her path. I knew who she was talking about and I'm sure so did everyone else. I think the biggest compliment was that she was thankful for the opportunity and experience from which she also learned.

Pence (2013) discussed the roles of teachers of the gifted and stated that, 'A teacher can't solely treat kids as a monolithic bloc such as 'gifted,' nor as a developmental stage, nor as racial group, nor as anything but as individuals. Such 'lenses' with which to view students are perhaps, at best, hypotheses to use but not to reify. With open dialogue and by listening without filters and prejudices, teachers can ask students rather than stereotype them, learn from talking to them rather than trying to read their minds, and involve them more as owners of their education rather than as objects upon which to act' (p. 59). Kesner (2005) acknowledged the strong influence of teachers on gifted children's academic and social-emotional development. Results indicated a higher degree of dependency of relationships between teachers and gifted students rather than non-gifted students.

In the primary school context there was evidence that Ruby had developed some strong emotional connections with her teachers over an extended period of time. A collective respect for each other and positive rapport enabled Ruby to own her own education and pathway through her later primary years.

Research also confirms the importance of positive and supportive student/teacher relationships for gifted students. Gifted students who have close, positive and

supportive teachers have been found to have high levels of achievement (Early et.al.,2007; Hamre & Pianta, 2001).

Ruby's teachers naturally experienced varying emotions in their role as educators, with feelings of inadequacy counterbalanced with elevated moments of success. Teachers would often engage in robust discussions in the staff room about Ruby, with some having no problem learning to accommodate her special needs, while others feared showing favouritism. It was a learning process for all involved; Ruby's teachers' respect for her increased as she took more responsibility for her learning. They developed greater appreciation for her efforts, and the efforts and interest from other stakeholders, as they endeavoured to meet the challenges of her special needs.

ON CHOICE

Taking Control, Isolation, Frustration

'How could I be challenged without it becoming a challenge in itself?'

(Ruby, Interview July 2016) *I was starting secondary school but I was still small.*

As I moved between primary and secondary school the open structure afforded me at primary school was problematic to emulate. I entered middle school at Year 8 in a co-educational setting with one hundred and sixty other students, a much larger cohort, nearly ten explicit subjects and ten distinct teachers for each subject. Fortunately, the school had a significantly developed exceptional learners' department, with an experienced staff and an established gifted and talented program.

I met with Ms. B to discuss my mathematics pathways, apparently even more study options were required in order for me to reach my potential, but I was wary of the further isolation that this would bring. How could I be challenged without it becoming a challenge in itself?

Gentry, Rizza, and Owen (2002) have discussed how students are often not consulted or do not have their perceptions considered in educational practices and research. Preckel, Goetz, Pekrun, and Kleine (2008) elaborated further, emphasising that in order

to gain feedback to understand the concepts of challenge, interest and time in creating an environment that demonstrates responsive teaching, increased attention to the perceptions of students is paramount because they are central to the learning process.

It is important that gifted students experience high quality differentiated instruction so that their education is meaningful, and they are able to make choices (Douglas, 2004). Providing students with choice, based on their own individual interests and recognised ability has been determined as a leading motivation for encouraging gifted students (Gentry & Springer, 2002). Furthermore, if profoundly gifted students are given choice, engaging tasks and content, creativity, cognitive flexibility and persistence will be promoted (VanTassel-Baska, 2008; Douglas, 2004; Gentry, Rizza, Owen, 2002).

Schiefele (1991) noted that when students are engaged through challenge, interest, and choice, learning becomes both enjoyable and productive. Whilst this could be said to be the case for students of any academic level, the heightened sensitivities and special needs of gifted students make this recommendation more notable.

(Ruby, Interview July 2016) *Although I was in a traditional middle/secondary schooling model, being allowed to make my own choices about my learning pathways was a key factor to my success. Breaking down the traditional timetable and curriculum for me was imperative.*

I met with Ms. B again to discuss my Year 8 subjects. Although I was fluent in Japanese and it seemed like my obvious pathway, I did not feel I had anywhere else to go with it. I had already decided that I was going to take up German. I had a passion for etymology and felt by learning a new language I would have a deeper understanding of the origin of words.

For the Exceptional Learners' team, having Ruby take responsibility for some of her own extension was viewed as a small victory for all. Ruby's increased responsibility enabled us to share the onus, becoming a new skill which both challenged and engaged her. Ruby reiterated that she appreciated being consulted on matters pertaining to her learning, as well as having 'choice', particularly in terms of her acceleration, which saw

her more engaged and producing more positive results, academically, socially and emotionally. Ruby's study of the viola, even though posing a different challenge, allowed her to learn, perform, and achieve in her own way. She acknowledged the need to select her own pathway and the result assisted her to feel in control. Ruby's need for control was closely linked to her perfectionism. Rule and Montgomery (2013) recognized the potential advantages of positive perfectionism. This type of perfectionism was described as adaptive perfectionism, and a student like Ruby would be constructing and completing their goals when they strove for excellence and performed at their ultimate best.

(Ruby, Interview September 2016) *In the traditional model of middle school, choices were still quite difficult due to timetable, as well as resourcing, staffing and IB curriculum constraints, which made acceleration and extended choices problematic. This in turn led me and many of my friends in the gifted program opting not to complete the prescribed requirements of the Middle Years Program, rather accelerating into the South Australian Certificate of Education (SACE) program like I did. As I progressed through the middle school into the senior school I was increasingly given more choice as were all students and therefore acceleration and alternative pathways were more easily facilitated.*

(Ruby, Interview July 2016) *My school had a culture whereby it was believed achievement is earned through 'good old fashioned hard work', and anyone can succeed in anything if they try hard enough. Most academically successful students were seen that way: I think they all have a lot of natural talent, but are 'marketed' by the teachers as hard workers and their talents are downplayed. This makes curiosities out of students who have success in academics, music etc. but are casual about it and don't spend their entire life studying or practicing.*

Ruby's parents recognised that she needed further extending outside academic realms and that it was important to provide balance, to help her flourish, as well as minimise frustration for her and those around her. They were highly in tune with her emotional, social, and learning needs. May (2000) noted that the lives of families with gifted children are both the same as and quite different from other families. A highly gifted

child can have a unique impact on the family and require some adjustments in family dynamics and parent-child interactions (Delisle, 2009). More recently, Honeck (2012) discussed how parents of gifted children act as guides, supports, inspirations, and advocates for them.

(Ruby's parents, Interview September 2016) 'We were acutely aware of the need to challenge Ruby in various ways and often had the resources within the family or sought resources outside the family to meet her needs.'

Tai and Phillipson (2012) argued that while not wanting to come across as demanding or pushy, many parents of gifted youngsters agonise about the overwhelming responsibility of adequately stimulating and challenging their children, both at home and school. Others express frustration and dismay at the reluctance of schools to explore the issue, and the resulting failure to cater for gifted children's special educational needs.

In my role as Middle/Senior School Gifted and Talented Coordinator I had close and consistent association with Ruby's parents, as we would consult one another on the progress, pathways, and pitfalls of her journey, which was not simply academic. Ruby's parents were both supportive of and supported by the school and teachers in addressing her particular needs. Parents in wanting the very best for their children often have very high expectations of schools and teachers in regard to gifted students and programs and may influence teachers' attitudes to giftedness through this association. Laine et al. (2016) noted teachers' conceptions of giftedness seem partly shaped by some contextual factors. Parents, classmates, and school counsellors, as significant others for a student, contextually play important roles in teachers' conceptions of giftedness because they are often the advocates for these students and form the basis of their support system. Reaching a balance for the parent of the gifted is complex. This could include overt or subtle messages of intimidation or judgement, or contrast, the presence of encouragement or praise. This means there is a fine line for parents in the messages that they portray and the significant impact it has on their gifted child. Leavitt (2017) discussed the importance of a positive association between school, parents, and

the gifted student, and the importance of parents and teachers working together to create opportunities for parents to become involved in their child's life at school therefore avoiding misconceptions about what is and isn't happening at school to accommodate the child.

(Ruby's parents, Interview September 2016) 'We were very happy and fortunate with Ruby's level of support and differentiation and indeed unique opportunities throughout her schooling. Her primary school received funding for one day a week for a gifted coordinator. She was able to support Ruby's classroom teacher to offer her alternative programs. In high school, there were challenges but as Ruby matured we had to advocate less for her. We had a close relationship with both schools and understood from the beginning that we needed to communicate to ensure positive outcomes for Ruby.

ON CURIOSITY

Pressures & Expectations

Perhaps I was something of an experiment for them.

(Ruby, Interview August 2016) *Whilst I always wanted to go to school, there were some lessons I didn't want to attend. Let's just say I had gotten off on the wrong foot with some teachers.*

I guess I was getting a little tired of second-guessing what the issue was; for some teachers I was an 'opportunity' and for others a bit of a nuisance. Perhaps I was something of an experiment for them.

I would ask challenging questions, which some teachers enjoyed discussing and explaining the answers, even if they had to leave it to a later time because they were busy. Those who didn't like me asking questions would give me a one-sentence answer, or tell me I was taking time away from more deserving students.

(Mr. P, Interview August 2016) 'I had taught for over thirty years when I found myself Ruby's senior science teacher. I felt completely out of sorts with her in my class. I

needed a lot of convincing that this was a good idea and I have to admit I was quite resistant. Why should she become my primary focus, when I had twenty other kids in the class!'

(Ruby, Interview August 2016) *I had very mixed relationships with teachers, as they each saw me differently. For some teachers I would have to feign interest in concepts I already understood, just to maintain classroom etiquette, whereas with others I didn't need to. In that case teachers should pre-test, then kids like me would not have to sit through so many classes where I literally pretended to be interested when I knew the content already. My time was wasted and it was really exhausting putting on an act.*

Pufal-Struzik (1999) discussed the importance of intellectual stimulation to avoid disengagement and Clark (2013) noted that profoundly gifted students require an enriched environment that provides subject choices that include appropriate challenges that encourage curiosity and exploration.

When Ruby was given the opportunity to make choices about her pathways she felt more empowered and in control, and this worked in favour of her teachers. Had Ruby been given the opportunity to be even further extended, she would have embraced it.

(Ruby, Interview August 2016) *'I always wanted to learn more, more than the teachers considered giving me, but once I had some acceleration options the teachers were more at ease as they weren't under so much pressure to keep creating new content'*

In my role as the Head of Exceptional Learners, the year Ruby entered Year 8, - acceleration, gifted education, and provisions for high ability students were introduced but relatively underdeveloped. Not having the appropriate infrastructure in place for exceptional students proved frustrating, along with a lack of resources, and flexibility of structure.

The contrasting attitudes, training and experience of teachers was evident to Ruby, as she readily admits to painfully *humouring* teachers who were a step behind, to being aware of those who struggled to accept the acceleration program, to feigning interest in class.

(Mrs. H, Interview August 2016) ‘Determining what Ruby could handle academically in relation to her maturity was not always clear.’

Teachers often conceded to me, as the Head of Exceptional Learners, that they had difficulty with the asynchronous development of Ruby’s intellectual, and social and emotional development, and felt challenged to find appropriate texts for her across key learning areas.

Another challenge for teachers was not so much in keeping abreast of Ruby academically, but in keeping up with her. This in turn was also the challenge for Ruby. The pressure and responsibility for teachers was not in fulfilling Ruby’s academic requirements, but her academic ‘needs’, mostly in the form of acceleration.

Throughout my time as Ruby’s teacher and mentor, many of my actions were reactionary to her specific needs at the time, as many roads were yet to be travelled. Ruby at one point in her schooling was studying curriculum across four different year levels, which meant significant changes to the traditional school structures and challenged the school administration and teaching staff, as her study plan was so far removed from mainstream conventions.

While Ruby felt the pressure of underlying stereotypes and expectations subconsciously and consciously administered by teachers, those teachers too were subjected to their own expectations to deliver perfect courses. As Ruby progressed and completed more courses with perfect scores the expectations were heightened.

ON CHALLENGES

Acceleration, Frustrations

Some things take time…

(Ruby, Individual Learning Plan Journal August 2008) *I wasn't sure what the delay in moving up classes was exactly… then I met with Mr. T and he explained in a nice enough way, that 'apparently' there is a lot of resistance to my acceleration from both my age group teachers and senior school teachers. Many teachers are I guess understandably against me skipping middle school classes to attend senior school classes, as they feel I am neglecting some of my middle school subjects such as social studies and religion, by both not attending classes and not taking as much of an interest in the classes I do attend.*

(Ruby, Interview August 2016) *Some senior school teachers also apparently felt I was a waste of their time which should be reserved for 'actual' Year 12's. And there was even talk Mr. T said that some teachers disliked me upsetting the hierarchy of talented students, as I was out-doing the established top students of the upper year levels for academic prizes. I thought this was a bit rough at the time, but I got it.*

(Ruby, ILP Journal April 2009) *I wanted to skip mathematics, Mr. T and I kept missing the mark with each other and I didn't feel like pretending just to fit in; feigning interest in concepts I already understood, just to maintain classroom etiquette. Funny that I'd kind of become a problem student just because I was so just so good at school. It wasn't like that with all the teachers… my relationship with most of them was great, but they all saw me differently.*

(Ruby, Interview August 2016) *I enjoyed being the helper in class as I found it the best way to develop my own understanding. It was also something I think was fair for me to do if I could. I found my explanations were sometimes better than the teacher's as I had learnt the material far more recently, and could work through things that teachers believed were obvious. Mr. T would rouse on me for not paying attention, but I was helping the girl behind me who couldn't follow what he was saying. I was merely attempting to explain it more simply. Mr. T was confusing the poor girl!*

I had a 'discussion' with a teacher again today… all because I challenged his workings on the board. I often do that, challenge teachers when I find explanations which don't make sense to me, as I simply want to understand why they don't make sense.

I got in trouble again today in mathematics, all because I wasn't listening… at least I wasn't talking like the rest of the class. Getting in trouble for not listening to something I already know! Not sure it made sense to me…

I figured I was helping Mr. T by not being a distraction… that while he taught the rest of the class I could work through the textbook at my own pace. It took me 5 minutes to understand everything he covered in a 40-minute lesson, so there was no point in listening except to humour him.

(Ruby, Interview July 2016) *Not listening in class may have got me off side with my mathematics teacher, but it actually improved my test scores, because I could focus on the more in-depth questions and problems rather than endlessly repeating the basics.*

Ruby elaborated by explaining that her giftedness was something that not only her peers were curious about but also her teachers.

(Mrs. H., Interview August 2016) 'I was puzzled about how much airplay Ruby received in the staff room. When I realised she was in my class, I constantly felt I needed to test my assumptions. I asked her lots of questions, I realised there was nothing I was delivering that she did not know already. I felt an overwhelming responsibility to come up with something else for her. I did not feel I had the background or skills to deliver what she needed in Middle School Humanities.'

Teachers were curious because they did not understand the way she thought and learned because it was so very different from what they knew. Ruby was articulate and forthright and would often challenge teachers if she thought they were not providing accurate content to the class. In posing a challenge for her teachers, Ruby unwittingly further isolated herself from them; as the responsibility of her education and attempts to accommodate her, became for some teachers a source of resentment and intimidation towards her.

MIND CHANGE

Belonging

It was the 'flying' - full stop!

(Ruby, Interview August 2016) '*Do you have any idea of the science involved in having an aircraft stay airborne? I do! And that's what worried me.'*

Initially Ruby found it challenging finding a compatible peer. Although her peers were generally accepting and patient it was not until she participated in a program called 'Mind Change' that she started to make some strong connections.

'Mind Change' was a program where students travelled interstate to a sister school to spend a week in a gifted exchange. Ruby experienced some natural reluctance in taking the trip. This program was pivotal not only with the connections Ruby made with the students from the other school but also the connections she made with the students in her school. This then led to stronger relationships being facilitated through the music program at the school and this program became the strong emotional support base for Ruby throughout her final years of schooling.

(Ruby's mother, Interview November 2016) ''Ruby was not a gifted musician, it was not her strength, but she connected more with her peers as she was considered more like one of them.'

On reflection maybe this was why this worked so well for Ruby because she was considered just like all the other talented members of the orchestra. In comparison to

other subjects and activities in which Ruby participated, this was where she was considered *normal, as Ruby termed it.*

Ruby's sister's experience of Mind Change, Music and GATE was equally valued.

(Ruby's sister, Interview November 2016) 'It was good to have time where being academic and interested in study was normal and encouraged. I remember there was an issue between us going on Mind Change or staying an extra night at journey camp, and I think the school was unaware that for us Mind Change was much more important for our development than walking through a cave. The people I met in GATE and Mind Change became the cohort who went on to do the sciences and maths in Year 12, so that was great support. The cohort was mainly guys, and my physics class was all-male. Most importantly I was with a group of people who challenged each other but who I also felt comfortable with.

I felt that being a gifted male is much more accepted than being a gifted female, maybe because there were just more of them, either way it was great to be with a group of people who worked to excel academically. Once the teachers running GATE changed though, it became more generic and there was less support available. I think the school undervalued these programs.'

This raises further consideration for gender differences in gifted students and the individual and collective experiences of boys and girls. A closer yardstick for Ruby's sister was no doubt Ruby herself. Rose (1999) noted that gender differences between gifted males and females become quite evident by adolescence, and reinforced that school systems should be aware of such gender issues and make efforts to alleviate potential gender differences through special programs or classes that encourage and foster students' talent.

SIBLING RIVALRY

Celebrating Difference, Belonging

'I was 'Ruby's sister'.

(Ruby's sister, Interview November 2016) 'I remember as kids, playing board games with Ruby could be very frustrating. She was so competitive, showed no flexibility and always followed the rules to a tee, which just took the fun out of it.'

Klein (2007) found, 'Gifted children insist on marching to their own drummer, which includes the ability to learn quickly on their own and the ability to make up rules as they go along' (p. 15). This translates in some cases to an intensity and intent to master concepts at a qualitatively different way with less assistance. Ruby pushed the boundaries of the conventional school structure, where in some cases she dictated the rules to situations that were uncharted by the school. Radical acceleration was an example of this where new policies and procedures were developed to accommodate this uncharted territory.

Ruby is the eldest of three girls who have been identified as gifted but the other were not identified as profoundly gifted. Living with Ruby, as well as potentially following in her footsteps at school highlighted the similarities and differences between the siblings, as well as their differing experiences of schooling.

(Ruby's sister, Interview November 2016) 'I'm not sure that Ruby and I have ever been particularly close. I think we are on the same wavelength in the sense that we are both scientific and rational, and we are naturally more independent, which perhaps has something to do with social competence.

Ruby and I didn't study together but would help each other or discuss things if our work overlapped, mainly in mathematics or physics or just bouncing ideas. Ruby helped me a little to prepare for the scholarship exam at the behest of our parents.

I felt more pressure academically from other students than teachers and from Year 8 there was an expectation that I'd get dux. That's not to say that teachers didn't have

high expectations of me, because they thought I could achieve in my own right, not because I was 'Ruby's sister'. There were also comments from some teachers which were meant in jest but were a bit insensitive. One teacher joked to the class that he should have retired after Ruby because he wouldn't ever have a better student.

But in all honesty I think it was more my own expectations and the fear that whatever I did I would not reach Ruby's achievements, which prevented me from working as hard as I might have. I reached my potential but I think that was more to do with the pressure I put on myself than the opportunities or flexibility available to me from the school.

I don't think the school afforded me the same opportunities as Ruby, but I don't think they should have. Ruby gained extra opportunities because she deserved them and needed them (e.g. doing subjects early, Physics Olympiad). I was offered different opportunities which were more valuable to me, such as the Japan Sister School Exchange. However, I do remember there was a biology assignment that Ruby handed in late because she misunderstood an instruction. Because she was expected to get a 20, she wasn't penalised which I thought was maybe a bit unfair at the time.'

(Ruby's sister, Interview November 2016) 'Outside of academics, Ruby struggled in a lot of situations, particularly social. She's not so good with change or unexpected events. Luckily, she found a group of friends who are equally socially challenged. However, it will be interesting to see how she copes when she moves out of home; to be able to cope with the workforce and being an adult, because she is used to getting her own way, is not so good working in groups, or listening.

But to Ruby's credit, she worked a lot harder than people think. Her achievements have come partly because of her giftedness but also to a large degree by the amount of hard work she put in. Sometimes people seem to think that it's been easy for her and she hasn't had to work that hard.'

The perceived needs of Ruby and the special consideration bestowed on her, as identified by her sister, indicate that Ruby's giftedness was regarded as unique in more ways than one. Both of Ruby's siblings were identified as gifted and both attended the

gifted program at the middle/senior school. Socially, both siblings were well adjusted and achieved at a very high level but neither required an alternative pathway through school. The middle sibling suffered most being in Ruby's shadow as she had a similar skill set and interests and the teachers naturally had high expectations of her. She indicated that she found this difficult, and that it led to her lack of engagement because she feared she would not be able to achieve at Ruby's level. She acknowledged that she put this pressure on herself and that it was not directed by her parents or school.

It was not so much sibling rivalry between Ruby and her two sisters, but a freedom to be themselves, knowing they "had each other's back" and that they were very alike. Phillips (2006) noted that gifted students responded positively to academic support, referencing not only parents and siblings but in some cases members of the wider family. This support correlated with heightened levels of motivation and achievement.

MUSICAL CHAIRS

This was an area in which I had to develop in a different way

Just as the childhood game of musical chairs requires focus, strategy, and a competitive edge, Ruby applied these principles to her study of Music in her desire to achieve. Ruby's competitive behaviour see-sawed between task-oriented competitive behavior, which was motivated by a desire to improve her performance and receive an improved grade, and other-referenced competitive behavior, which was motivated primarily by a desire to outdo her peers (Udvari & Schnieder, 2000). A specific example of referenced competitive behaviour was when Ruby decided to compete at the highest level in the Australian Physics Olympiad. She competed and was selected against thousands of other students and once she achieved this honour she never competed again.

Udavi and Schnieder (2000) noted that distinguishing between task-oriented and other-referenced goals in competition has important implications for the social adjustment of gifted children, aside from the implications for achievement. They indicated other-referenced competitors are less well-liked by peers and are considered aggressive. In Ruby's case her intense competitiveness was perceived as intense and aggressive.

Peers did not enjoy spending time with Ruby who turned everything into a contest and bragged and boasted when victorious. For Ruby this then represented a significant social disadvantage and often led to Ruby's isolation from her peers. Ruby's parents and teachers attempted to circumvent this behavior by stressing and rewarding task-oriented behavior. Given Ruby's level of achievement, she was inevitably prone to competition and exposed to competitors, both task-oriented and other referenced.

This acclamation appeared somewhat of a game for Ruby, a competition albeit with herself, her end goal being to get a perfect score, adapting to her environs to outsmart the system, to claim the last chair, the winner's seat.

(Ruby, Interview October 2016) *Music opened up a new world for me in a way… I found myself in unfamiliar territory, attending professional workshops, performing outside the school and on interstate tours - partaking in concerts, competitions and collaborations, sometimes with other schools, rehearsing, working as a team, socialising, interacting, and goal setting.*

(Mrs. R, Music teacher, interview October 2016) 'I believe Ruby's involvement in music was an integral part of her socio-affective development. From Year 8, she was working as part of ensembles with students both older and younger than herself. This required her to work collaboratively in a musical group with the end goal of performing for a variety of concerts and activities, and involved rehearsals, teamwork, social interaction, and goal setting for group situations. Being forced to work, live and play in situations and environments that were unfamiliar to her in performances outside the school and on interstate tours, brought out the best in Ruby, as everyone was in the same situation and there was little separating each student.'

(Ruby's mother, Interview November 2016) 'As Ruby's parents, we were happy that her involvement with music allowed her to participate with students beyond the classroom. Her interactions did not require academic ability, but rather the ability to get on with others in a variety of settings. This was a challenge for Ruby and I believe for the majority of time she relished being afforded the connections.'

(Ruby, Interview October 2016) *Music was quite different for me compared to other areas of academic study because a good proportion of the subject was performance based. Whilst I had begun viola study at a reasonably young age I was certainly not a prodigy. I had not put in the hours of practice that some students had and I must say it was nice to be on a similar footing with them. Give me theory any day!*

Not being the most high-level performer I don't think I experienced as many social drawbacks for being gifted as I may have in other areas. It certainly wasn't obvious to me. The pressure was off a little because I wasn't expected to excel necessarily because it wasn't so much an academic pursuit but creative… which I knew wasn't my strength.

(Mrs. R, Interview October 2016) 'As Ruby's music teacher my organisational skills and competency were constantly tested, as I fielded her challenging questions and readying myself with extension activities that were interesting and had clear developmental goals. Ruby was always ready to ask more questions in order to advance her understanding of what was needed and to get to the core of the educational point.'

(Ruby, Interview October 2016) *I decided to do four Music subjects over two years; two performance based (solo performance and ensemble performance), Musicianship (theoretical and creative), and Music in Context (language based music history culture).*

Although I wanted to develop myself in many different areas I couldn't fast-track practice like I could with mathematics. I didn't mind that acceleration wasn't available to me because I really enjoyed music as a subject and wanted to challenge myself in this area. Yet whilst I was realistic that my natural abilities did not lie in the performing arts, and maybe it was about time I relaxed a little… I still couldn't help doing my best and aspiring for perfection.

(Mrs. R, Interview October 2016) 'Whilst Ruby was keen to study Music through to Year 12, the chance for acceleration at that time and still at most times in most schools was mostly offered in the performance stream. This was not really the best option for

Ruby as to be the most successful she needed longer (or at least the same relative time) to develop her instrumental skills.

The ability to play and phrase musically can be learned but does not always appear to be natural which was sometimes the case with Ruby's viola playing. She was keen to develop in all areas and when practising the notes and rhythms achieved the first and second step but the third step was always harder, and at the best of times required a lot of time and experience to develop. It could not be accelerated or fast tracked. It was then decided that Ruby take on a different challenge.'

*(***Ruby, ILP Journal Reflection May 2009)** *I remember being thrilled when Mrs. R told me she had something important to discuss with me and I knew it wasn't the acceleration program. She invited me to join the staff quartet working with three professional musicians; an opportunity to succeed at the highest level for ensemble performance.*

(Mrs. R, Interview October 2016) 'Music was an area where tapping into resources was often about finding opportunities for students to participate in performances outside the school. These may have come in the form of combined concerts, or competitions, or collaborations with other schools or professional workshops at home or on tour, allowing Ruby to be challenged musically whilst often requiring social skills also.'

(Ruby's mother, Interview November 2016) 'I really valued and appreciated the extra-curricular activities available to Ruby as I knew they would help challenge her musically as well as develop her socially and emotionally through group rehearsals, concerts and music tours. As a music teacher myself and an active member of the Friends of Music, I felt it was especially important I was not pushy, demanding or even challenging to either Ruby or her teachers. I was very realistic about Ruby's musical abilities and understood the school's reasons behind their suggestions for her senior music study.'

(Ruby, Interview October 2016) *As I'd progressed to senior years, other aspects of the music course required musical creativity and the ability to write what you hear and hear what you wanted to write. This was an area in which I had to develop in a different way*

as it was not so scientific or mathematical but much more musically creative and required developing an inner ear for music.

(Mrs. R, Interview October 2016) 'I recall Ruby working on her Year 12 musical arrangement for the subject of Musicianship with her goal of achieving a '20' always never far from her or my mind! This was 40% of her grade and the biggest area to demonstrate was musical creativity. Whilst her arrangement developed with theoretical accuracy and was meticulously edited, the creative angle did not come easily or naturally and it was a challenge as a teacher to develop this to the level required for excellence.

Ruby's constant requests for *What mark do you think I will get for this?* became difficult to answer when the area that was letting her down was her musical creativity, and the challenge as a teacher was to attempt to bring that out through suggestions and listening tasks without giving her specific ideas that weren't her own.'

(Ruby, Interview October 2016) *I knew the examiners were looking for the 'X factor' in my performance which I also knew was not really a tangible, teachable area, so I had the extra challenge of trying to perfect my musical arrangement minus the creative flair.*

In attempting to attain a perfect score I think it was just as hard on Mrs. R as it was on me, if not harder, as we both became more aware through the process, that as good a music teacher as Mrs. R was, creativity just couldn't be taught!

(Mrs. R, Interview October 2016) 'Whilst I had seen numerous arrangements over the years that surpassed Ruby's final presentation, there were theoretical and aural components in the subject that carried her through to the highest level.'

(Ruby, Interview October 2016) *Although it wasn't the most perfect arrangement for my final presentation, my preparation was, and it earned me a perfect score. I had managed a '20'!*

Gifted students are more likely to achieve if there is an active partnership between stakeholders, these being school and home (Desforges & Abouchaar, 2003; Jeynes,

2007; Pomerantz, Moorman, & Litwack, 2007). Effect sizes for the impact of parental involvement on children's academic achievement have been calculated from meta-analyses of studies to be 0.51 for all schools, which is a moderate effect size (Hattie, 2009), meaning that parental involvement has influenced student achievement positively. For profoundly gifted students, there is evidence that demonstrates the importance of engaging parents in the education of their children. Whilst education is made more effective by sustaining and increasing the role of parents at home, profoundly gifted students require special academic interventions that make positive relationships between parents, school and child more crucial (Robinson et al., 2007).

As a member of Ruby's support team, it was evident that her teachers and parents shared the universal goal of allowing and nurturing Ruby to have the learning experiences she needed. This was particularly evident in the area of music, whereby parental involvement was more about support for and development of the whole person in terms of connection and creativity, than it was about meeting the goals of pure academic achievement. Schader (2008) noted that the parental role changes with a gifted child to include the task of dealing with the giftedness of their child and the responsibility for finding reliable information on parenting such a child. Strip and Hirsch (2001) explained that for parents, teachers and support persons to build alliances it is essential that for each adopt the other person's perspective to effectively support the gifted child.

Whilst Ruby acknowledged that music was not her strength, the academic pressure to achieve was off, and she was enjoying the social encounters with her peers although she still demanded perfection. Her competitive nature brought out a meticulous accuracy in music theory which helped her ultimately achieve her perfect score of 20.

Ruby was driven by results and her self-imposed expectation meant nothing less than 100% was acceptable. Ruby's competitiveness put pressure on her teachers as in the case of her music teacher Mrs. R, where she was challenged to develop Ruby to the level required for excellence in an area where she didn't naturally excel. Rimm (1986) argued that competition aimed at self improvement, or competition with oneself, benefits

gifted children. Li and Adamson (1992) endorsed competitive and individualistic learning styles over cooperative ones, suggesting that some degree of competitiveness might maximize the academic performance of gifted pupils. This holds true for Ruby, who was motivated to compete and perform at the highest levels and often refused to work in co-operative groups because she was unable to control the result.

Whilst Ruby was cognisant that she required a different skill set for music achievement (that being a creative skill set which was difficult to impart), she consciously adopted both a methodical and analytical approach to high achievement in music. VanTassel-Baska (2004) noted that too much conventional learning in an area where the ideas of others become so crystallized as to block innovative thinking in the domain can be negative for creativity. Ruby was intent on learning her music performance pieces perfectly in order to secure a perfect score, but her music teacher noted her lack of creativity and expression in performing the pieces and explained that this was not something that could be taught. Rule and Montgomery (2013) cited several long-term implications for students with negative perfectionism including a reduction in creativity, risk taking, and differentiation. Ruby exhibited some behaviours consistent with maladaptive perfectionism where she may have lost focus on her individual competence and instead, focused on comparing herself to her peers (Speirs Neumeister, Williams, & Cross, 2007). Elliott (2005) suggested positive perfectionism, when linked to mastery of goals, can improve learning outcomes. Ruby's approach to setting goals to master content could be considered in this case a positive aspect of her perfectionism.

Ruby's involvement in the school music program was based on the need for students to interact on a personal level with their peers, highlighting the academic, social and emotional benefits of like-minded gifted students being grouped together. Neihart (2007) reported that there were improved social relationships and more positive attitudes towards learning when like-minded gifted students were grouped together. Rogers (2002b) suggests that the more time gifted children have to learn with other gifted children, the greater the academic benefits because gifted students can learn more quickly and can work with more complex and in-depth material and processes when grouped together (Kettler, 2011). Specifically, Gross (2000) noted profoundly gifted

children need to be in an environment that will ‘least restrict’ opportunities for socialization.

Yet, whilst Ruby acknowledged that being with like-minded peers took the pressure off her to be the one who knew all the answers, the assumption from teachers that grouping gifted students together was mutually beneficial, discounted the reality that students did not necessarily share common interests. Kettler (2011) provided strong evidence to support the academic advantages of grouping like-minded gifted students, but Bate and Clark (2013) noted mixed findings on the social and emotional effects of grouping gifted students and concluded that gifted students do not form a homogeneous group so it is important that they should not be assumed to have similar interests.

Stakeholders agreed that while Music challenged Ruby in a different academic way because she was forced to modify her approach to achieve, it provided a creative outlet and counterbalance to her usual mathematical and rational approach to her studies.

Ruby’s exposure and experience in the area of Music was akin to her broader experience in other subjects, in that her inner drive, determination, and competitive spirit came to the fore in her attempt to achieve excellence. The greatest identifiable difference was that the creative aspect of music studies was her greatest challenge. Ruby took it upon herself to master this challenge by adopting an analytical and methodical approach to mastering the technical aspect of the course requirements in Music. This also mirrored Ruby’s approach to mastering exam techniques and assessment procedures in other subjects.

(Ruby, Interview October 2016*)* *I guess I was a little obsessive in the way I prepared for my exams, I had a formula that worked for me, I never left anything to chance.*

Grobman (2006) describes this inner drive or autonomy as feeling 'like an obligatory force of nature' (p. 200). He also found gifted students’ need for autonomy developed early and was a strong part of their personalities. Ruby was given autonomy in her learning throughout her schooling and felt most engaged at school when she could control her own learning.

The experience for Ruby's music teacher was no different from her teachers of other subjects in that her drive for perfection brought added responsibility; Mrs. R had the additional weight of instilling creativity in Ruby, a concept which was too abstract to teach. For Ruby, perfectionism was a way of life. Mrs. R created opportunities for Ruby to develop and explore her creativity in music by giving her the challenge of creating compositions which challenged her to think differently.

Some theorists suggest that gifted students have perfectionist strivings that result not necessarily in frustration, but in the healthy pursuit of achievement (Enns & Cox, 2002; LoCicero & Ashby, 2000). "In a positive form, perfectionism can provide the driving energy that leads to great achievement" (Roedell, 1984, p. 127). Shewmaker (2010) noted that perfectionism is heightened when associated with gifted students understanding that perceived high standards of parents, peers, and themselves can serve as possible causes of perfectionism. In Ruby's case, her perfectionism in pursuit of high achievement resulted in positive cognitive outcomes, although she suffered from anxiety about living up to her own expectations.

HEALTHY COMPETITION

Striving to be the best, perfectionism, acceleration

Year 12, it's all in what you choose to focus on.

(Ruby, Interview August 2016) *I have always been a goal setter… driven to compete and achieve… a natural part of me. My key to success at school I believe is setting goals that mean something to me and then sticking to them. Goals which are both achievable and very rewarding.*

Senior school saw me continue to challenge the mathematical learning that was being provided to me. In Year 8 I asked to do the Year 10 Mathematics paper and of course blitzed it. No I'm not so much arrogant, just honest.

In Year 10 I was accelerated into Year 11 English. The best part about it was getting more feedback on my essay writing and being able to improve, whereas I wouldn't have got those chances in the Year 10 classroom. The texts were more challenging, however

I wasn't more than a year above my peers, so I felt I was able to engage with those texts on a similar level to the rest of my class. Unlike the other subjects, I didn't have any great ambitions to be the best and most mature thinker in my English class. I don't think I was ever going to be that, even if I'd been a year older. I had some writing talent, hence why middle school English was so tedious, but I wasn't that talented at the text analysis of senior school English. I was happy to sit comfortably in the upper-middle of the class, although I think the teachers expected that an extra year would unearth some hidden depths. In the end I didn't continue into Year 12 English Studies. I only had room for one of German or English, and I was far more interested in German. I also didn't feel I had a realistic chance of a Merit in English even as an actual Year 12, whereas German was almost a certainty. I ended up winning the state prize for German, as well as producing some of the best work I ever did at school, so it was a good call. The NSW and Australian Test papers were coming up and anything less than a high distinction was not acceptable.

Year 12, it's all in what you choose to focus on. Whilst other students were busy grasping concepts, I was mastering exam techniques, identifying the way each subject assessed perfect scores and finding ways to fulfil that i.e. problem-solving practice for mathematics, memorising responses for each point in the syllabus for science subjects, and learning additional vocab and grammar for German. I guess I couldn't blame the other students for being a bit miffed at me for beating them in the test, they worked hard. But hey I work hard too, just in a different way.

If I get a perfect ATAR in Year 12, I will automatically receive a scholarship at Adelaide University which will allow me to live comfortably through Uni without ever needing to work. My most powerful goal thus far.

I applied for my scholarship.

The way I ran my school life was also something I couldn't share with others. I avoided discussing my extension program or plans for the future because I knew other students found it unfair and I didn't want to appear arrogant. In particular, for three years I was desperately working towards a 99.95 ATAR and this scholarship, but I felt I needed to

keep that goal very quiet, because that wasn't an achievable goal for anyone else so it would upset them that I was pushing myself to make sure I achieved it. This was a very big thing in my life and so having to hide it meant I could never be completely open about my feelings with my friends, except in occasional one-on-one conversations. I'll admit I had a shyness, awkwardness which diminished when reveling in the limelight… Perhaps as I was getting older, I was becoming less self conscious.

I didn't need any tricks to keep up with the content of school, I just got it! Any concept any textbook I pretty much understood automatically. I guess that's why I was especially a curiosity amongst my peers, because I regularly out-performed the hardest-studying students without getting out of first gear intellectually.

I know I have a complex personality, I can be vulnerable, I over think things, my imagination sometimes takes over me and my mind is full. I am passionate in everything I do and sometimes this can be construed as obsessive. I tend to end up fighting for causes I believe in; I guess I am a leader in some respects. I guess growing up I had this intellectual insight that my peers were not experiencing which tended to lead me to setting unrealistic expectations and social and intellectual space awkwardness with my friends. I was socially awkward but accepted.

I often felt isolated from my peers, lonely and mismatched, with many awkward interactions. I likened myself to a Siamese fighting fish forever separated. The ultimate 'other' always slightly apart from my peers, able to interact but only on a superficial level.

Webb et. al. (2005) discussed how the drive that underlies the ability of highly gifted children often causes them to display emotional, social, and psychological characteristics that are not always valued by their peers, their families, or some teachers.

As Ruby's mentor, I noted that she was fortunate in that she was not dependent on interaction with others to fulfil a personal need. She could articulate the reality of the awkwardness, maintaining what could be described as a healthy distance from them.

She thrived on the opportunity to accelerate in order to fulfil her ultimate goal of a perfect ATAR often at the expense of her social interactions. At times Ruby exhibited high levels of stress related to expectations of herself, heavy academic loads, and decisions and anticipations pertaining to postsecondary education (Robbins et al., 2006). She knew she would be afforded the choice of any university course she desired and this in itself was daunting for her, but all part of the competition she craved.

TAKING BACK CONTROL

Perfectionism, Determination to excel and succeed

I didn't like competing in anything where I didn't have control of the result.

(Ruby, Interview August 2016) *I went to bed feeling fully prepared for tomorrow's mathematics test. I was going to ace it with a perfect score.*

Yep, I'm pretty sure I aced it!

Mr. T handed back the mathematics tests. I turned my paper over… when I was caught off-guard by the sight of a '97%! There must be an error, because I don't make mistakes.

'You failed to show the necessary workings Ruby.' Mr. T delivered almost pleased.

'But all my answers are correct!'

'Yes but you took shortcuts and did not show your working which was required!'

'But the end result is the same. Why should I be penalised, it's not fair!'

'No, not fair, would have been giving you full marks over students who did show the working out.' You always want to find the quickest answer or method for solving a problem, not the most creative, you just want to get to the end point and finish!'

'What's wrong with that?'

‘Some things take work!’

‘But if you don’t have to work as hard and still get the same result, and even quicker… then why not?!’ (That was a rhetorical question)

‘It’s still 97!’

I walked away with Mr. T. having no idea of what this news meant to me…

Sometimes this approach was problematic with teachers and peers who were resistant to Ruby’s methods and approaches. She had her own way of doing things and her inflexibility to consider other methods or points of view was challenging and often caused conflict.

(Mr. T, interview August 2016) 'Ruby displayed a dogmatic attitude to the way she approached mathematics problems as well as determination to complete the problems her own way. She would work through the problems without the appropriate steps having already determined which steps she deemed purposeful and those she thought were not. I recall many debates in the staff room over this as well as Ruby’s insistence to question marking schemes. Teachers communicated that they often felt intimidated by this and *were always ready to be challenged*.'

(Ruby, Interview August 2016) *I felt stressed, frustrated and anxious when ‘rules’ had not been adhered to. I didn’t like competing in anything where I didn’t have control of the result.*

A common thread in the stories of the main participant Ruby, and her teachers throughout was regardless of highlighting how giftedness is an exceptionality, the focus in the mainstream classroom was seldom about meeting the needs of high ability students, but rather meeting the needs of struggling students in an effort to raise standardised assessment scores (Huitt & Monetti, 2015).

This sentiment was echoed by a learning support assistant at Ruby's school. **(Learning Support Assistant, interview July 2016)** 'We worked so hard with the students who were struggling to pass, that very little time or discussion was centred around the masses and certainly not the high ability students, we had a GATE program for that.'

It is important to note, the GATE program at this school offered one hour a week in a pull -out program, so while teachers may have believed that high ability students were well catered for outside their classrooms, the time allocated was not commensurate with the needs of these students.

Ruby told stories of the barriers that arose to her affective skill development and how her academic achievement or performance in the mainstream classroom compounded some of her social issues, because her achievement was transparent and visible to her peers. Ruby articulated her frustration with teaching and learning in mainstream classes which were often teacher-directed and added that going over and over content and hearing other students' mistakes was frustrating. This was not the only concern for Ruby.

(Ruby, Interview August 2016) *When I was able to answer all the questions correctly this perpetuated the distance with the other students. I stopped answering all the questions, I saw no purpose.*

Ruby was no 'shrinking violet', rather she came to the fore in any opportunity to share her knowledge, confident and comfortable in her role. Ruby's sensitivity to social injustices and hypocrisy displayed as being cynical and helpless at times. She read widely and thought deeply about everything that was happening globally. She expressed concerns about the future and her need to do something with her life that might help in some way.

Silverman (1993) discussed how the efforts of teachers to provide an appropriate curriculum for gifted students serves as a catalyst for the increased expectations and contributions of gifted students to society for the betterment of humanity. The significant underlying message communicated in much of the literature related to educating gifted

students is that schools have a dual responsibility to search actively for the unique gifts of each individual student, and to encourage gifts and talents to be used in the service of others. Mofield et.al. (2008) discussed the need for gifted-education programs to consider addressing the emotional needs of gifted students through affective curriculum. With Ruby's program it was heavily weighted to addressing the cognitive aspect of her needs and in some respects her affective development was addressed with the academic provisions. An example of this was the impact of acceleration whereby her academic and affective needs were met concurrently. Although this were so, there were limited opportunities provided for explicit delivery and approaches to affective curriculum.

Ruby's innate sense of right and wrong applied to others just as it did to herself, she was just as hard on others as they were on her, and she was perhaps unaware of the judgement which went both ways. Her pragmatic nature assured her that as long as she was in control she could handle it.

ON FAMILY

Belonging

'They fitted in better than me, or maybe the school was ready for them

as they came after me.'

(Ruby, Interview August 2016) *Thankfully my family are very supportive of me. My sisters in a way are my best friends and I have a very close relationship with my parents so I am lucky. They don't put any more pressure on me than there already is.*

It was reassuring as both former educator and now researcher, to hear Ruby speak fondly of her relationship with her siblings and the overwhelming support she felt from them throughout her schooling. She reflected on their similar interests but was quick to point out how very different they all were. Ruby also spoke of the opportunities they were provided not only at school but through her parents creating networks for new interests and hobbies.

My sisters were always there for me, we are very close, we have quite different interests and friends but we could always rely on each other. I think they had a more normal schooling than me. They were gifted too but their talents emerged differently from mine, I think I was more socially awkward, but maybe I am being harsh. They fitted in better than me, or maybe the school was ready for them as they came after me.

(Ruby, Interview September 2016) *Maybe it was unrealistic to try and make close peer relationships at school when really I was only physically there but mentally I was always somewhere else. I felt different to all the other students, they did not understand me, they did not want to play my games. They were disinterested in my interests, although I had a few friends in the string band, but none that I would call close friends.*

(Ruby's parents, Interview July 2016) 'Ruby is a strong character and as she grew up she would often resist peer pressure in preference to her own chosen activities and ideas and at times this had a negative social consequence. Making strong connections with friends was difficult for Ruby, most kids found it hard to understand her and she often would verbalise that she felt they were too immature for her. Sometimes she told them too, which did not help her cause. We sometimes felt responsible on Ruby's behalf, but realised over time her behaviour and its consequences were her responsibility. We worried for her, but knew in time she would find her place.'

The voices of parents are often silent in the literature around outcomes for acceleration and radical modification of programs and pathways for gifted students (Wardman, 2016). Gross (2006) noted that acceleration and modification of programs for profoundly gifted students is beneficial, but noted a lack of confidence and understanding from parents and a fear that their children would be further socially isolated by such provisions. This was exactly the case for Ruby, her parents were very skeptical of acceleration and requested Ruby remain with her peers at the age-appropriate level with the exception of radically accelerated subjects. This meant Ruby went on camp, played sport and joined all Arts subjects with her peers but was radically accelerated in all other learning areas. The school was accommodating of the parents' concerns and

requests but traditional timetabling constraints made this a challenging timetable to create for Ruby.

Ruby's parents described her as neither a leader or follower. **(Ruby's parents, Interview September 2016)** 'Ruby did what she wanted to do, and if students went with her that was fine, but she would not ever do anything she did not want to do. She was quite stubborn when she made up her mind. Ruby developed her leadership skills and traits in mentoring peers in class and leading teams in competitions where she had respect from her peers for her knowledge. She never seemed to mind helping others in class although I think it frustrated her sometimes.'

(Ruby, Interview August 2016) *Teachers expect me to be super organised and a natural leader just because I understand the concepts first. I might be organised but have never considered myself a leader. Something I need to work on I guess.*

In Ruby's case she did not demonstrate all personality traits of typically gifted individuals, and while the expectation and pressure on Ruby was real, it did not translate into pressure on her. Rather she continued to channel her energies into not just being the best she could be but in being the best. Whilst she naturally helped others and was also mentored and encouraged to do so, Ruby did not necessarily seek to lead others, only herself.

Ishak and Bakar (2014) found that highly gifted and talented students scored high in all domains of empathy, in particular, the ability to leverage with diverse groups of individuals, to provide services for others, to care for others and to understand and help others. Ruby ironically was often in conflict as she demonstrated empathy and a sense of justice towards her peers, but became frustrated with the apparent lack of understanding or grasping of concepts by some. Ruby's obvious lack of genuine connection with other students became a pattern, which eroded at times when she found herself in a less competitive mode, particularly in music when she was competing against herself. Some perceived this as Ruby's self-interest because she was so oblivious to her immediate environment.

Ruby's pragmatism meant she sometimes overlooked others, and her main concern became how things really affected her, their impact and outcome. To others this seemed like a lack of empathy, but in reality it was Ruby's lack of understanding of her immediate surroundings.

DUTY OF CARE

Teacher Efficacy

'I was perplexed by Ruby's abilities and quickness…

it could be intimidating for a teacher.'

(Ruby, Interview August 2016) *Teachers were often trying to fit me with other 'like-minded' kids. Just because we share academic giftedness doesn't mean we have anything else in common. I missed my real friends, at least we came from the same backgrounds. Perhaps this was one way for teachers to feel like they'd had a 'win' when they didn't know the answers.*

As researcher I have noted that although the learning needs of gifted students in most school systems are being recognised, very little time is dedicated to staff training, coordination of programs and for trained specialists in gifted education. Reid and Horváthová (2016) noted that most attention is paid to identification and development of gifted children, but very little consideration is given to the training of teachers to teach gifted children. This lack of emphasis on teacher education does not guarantee sustainability of gifted education globally. Professional training and staff development are seen as providing the solution to applying instructional strategies for gifted students in mainstream classrooms.

(Mrs. H, Middle School teacher, Interview October 2016) 'I struggled to know how to extend and 'help' Ruby, and it wasn't until I understood 'how' she learned, that I understood 'how' to teach. I wanted to push the GATE students to think beyond the problem without segregating them from their classmates. Often this was challenging and I felt I lost Ruby in my classes as it was not challenging enough. Her level of work was extremely high and I was in conflict with delivering an explicit curriculum and

meeting the needs of such a diverse group of students. I always felt I could not do enough for Ruby in my classes and I think she used my class in the end to do other things. So I guess I failed her in this respect. I really do not think she needed to attend middle school humanities, she was well beyond it. I guess on reflection I did not feel fully equipped to understand her needs fully even though I was a teacher of fifteen years' experience. I also noted the obvious relationship between the difficulty of a task and Ruby's engagement; the easier the problems, the more disengaged she would get. This could be a general assumption for students not assessed as gifted and it is interesting to note there is no difference for gifted and talented students. Once problems became more difficult students become fully engaged. I, at first, thought the goal in teaching gifted students would be to keep them on task and busy. This was not a problem at all. The three gifted students in my class including Ruby were always on task and willing to work hard for me. They continuously wanted to work on problems that they thought could 'stump' them. It was me who was stumped!

I often questioned Ruby to understand, challenge or stimulate her thinking, to refocus her on the problem at hand. Ruby was a great debater so she always had an answer. She appeared to be independent, perseverant, and self-guided in her learning, and I felt as her teacher my role was largely as a facilitator to encourage Ruby to explain and record her thinking.

I was perplexed by Ruby's abilities and quickness… it could be intimidating for a teacher just as she surpassed the older students as well.'

Without the support of general education teachers and administrators, gifted educators face obstacles in bringing curricular and instructional change necessary to challenge and stimulate gifted students. Megay-Nespoli (2001) revealed that teachers' attitudes can impact students' motivation, achievement, and intellectual growth. Teachers are in an extremely powerful position to influence the future of student learning environments and all students, including gifted students, will be affected by their attitudes. Attitudes of teachers are a central force that impact teachers' actions and reactions in their classrooms.

Smith and Smith (2000) discussed a teacher's responsibility in an inclusive classroom as being to provide for the individualised instruction of any students with special needs, including gifted students, and to meet the individualised needs of remaining students while continuing to maintain a classroom of mutual respect. The major shift in recent times to an inclusive classroom has caused a greater demand on teachers with many teachers feeling threatened or challenged due to not possessing adequate knowledge about diverse methodologies, especially the ability to differentiate the curriculum in ways appropriate to the needs of profoundly gifted students.

Ruby's teachers discussed the difficulty of the ongoing challenge of determining cognitively appropriate tasks for Ruby, as the Head of Mathematics explained. **(Mr. T, Interview August 2016)** 'It was hard to figure out appropriate problems for her that would be challenging. Yet in the beginning, as a teacher on reflection it was important for me to recognise these things in order to adapt my instruction. It was challenging teaching Ruby and a great opportunity to think on my feet. I learned that it was important to be flexible and adapt. It was vitally important to guide Ruby through, by not showing or telling, but allowing her to work through her work with only guidance from her. Utilising probing questions to guide Ruby and keep her on track but not give her the answers was the key to mentoring and guiding Ruby's learning.'

Research also confirms the importance of positive and supportive student/teacher relationships. Gifted students who have close, positive and supportive teachers have been found to have high levels of achievement (Hamre & Pianta, 2001).

Ruby and her teachers at various times made their frustrations known to each other, however, the challenges they faced were resolved as they worked towards common goals.

FRIEND, FOE OR FACILITATOR

Belonging, Acceleration

'The way she explained things made much more sense than the teacher.'

(Ruby, ILP Journal Reflection March 2009) *Here I was, tiny in stature even for my own age, mixing it with the older kids. My first lesson… I didn't have any nerves; I didn't feel intimidated… I was where I should be after all.*

As Head of Exceptional Learners and as a mentor I felt a great responsibility for the accelerated journey Ruby was on. Walking past the Year 11 Senior Science classrooms one afternoon I saw a group of predominantly male senior students. Ruby was 14 years old and a petite and relatively short student who by all accounts appeared physically younger than her biological age. I could see her through the window sitting in the front row dwarfed by 16 and 17-year-old boys. At this point I questioned myself, and asked what I had done, to put her in this position?

I had no doubt Ruby had the ability to succeed academically in this course but I questioned my decision to advocate so hard for her to join this class and accelerate by two years. I worried about the social and emotional impact on Ruby in this class knowing full well that the teacher had openly indicated his dissatisfaction about having to take Ruby into his class.

The teacher, a mature, experienced, dedicated senior teacher was extremely resistant and openly communicated to his peers that accelerating Ruby into his class was an error of judgement and that he would not support it. Needless to say, I had the support of the Head of Senior School at the time and Ruby was enrolled in this class and attended despite her teacher's resistance. Throughout this process Ruby was unaware of the resistance of the teacher. She was very driven and made it very clear that she could cope with the class and the peer age difference and everything in-between. I trusted my judgement but more importantly I trusted Ruby's.

As Head of Exceptional Learners, my role necessitated tracking Ruby's progress in this subject quite closely because this was the first subject in which she was accelerated.

Quite quickly she became very popular with the students in her class as they realised she had already mastered the content and curriculum outcomes.'

One past student when asked said **(Student 1, Skype Call, October 2016)** 'I loved having Ruby in the class, it was a little weird having someone so young, but she helped us understand the concepts better. The way she explained things made much more sense than the teacher.'

(Student 2, Skype Call, October 2016) 'I know sometimes Ruby got frustrated with us when we didn't understand the answers to the questions. Well we didn't understand how she knew them all in the first place.'

Some months after Ruby commenced the class her mathematics teacher approached me with a copy of her Mid-year exam paper, rather perplexed.

(Mr. T, Interview August 2016) 'I have never read such detailed and comprehensive answers in a test paper, how can she have such a depth of understanding when she hadn't even covered some of the concepts yet?'

As Ruby grew older, her awareness for how things worked became more acute, especially as the drive behind her need for achievement was her desire to be the best. Just as she had understood things she hadn't been exposed to, she also grew better at concealing her frustrations, channeling her anxiety, and feigning interest in the topic at hand. Udvari and Schneifer (2000) noted an important distinction between task-oriented competitive behavior, which is motivated by a desire to improve performance, and other-referenced competitive behavior, which is motivated primarily by a desire to outdo an opponent. Individuals who possess this intense desire to outdo another in various situations are sometimes referred to as hyper-competitive (Horney, K.,1937; Ryckman, Hammer, Kaczor, & Gold, 1990). Several theorists have argued that competition is necessary for achievement because individuals need to compare themselves with others to determine if their performance constitutes a substantial accomplishment (Zanzig, 1997). Ruby could be described as hyper-competitive or

aggressive throughout her schooling. She continually compared herself with others to determine the validity of her performance.

PURPOSE AND PEROGATIVE

Individualism, Isolation, Independence

It was about executing under pressure.

(Ruby, Interview July 2016) *I still preferred to work independently in class. Mainly because I understood the concepts that we worked through in class just from reading the textbook. The teachers would go through each type of problem in a 'recipe book' manner, step by step, it may have well been cooking class. Whereas I'd look back in the textbook at a few examples to work out what the purpose of each step was and simply go from there.*

I spent most of my time on practice questions and past papers, trying to get to a point where I could solve any given exam problem instinctively without getting bogged down. I thought this was the best way to improve my chances of a 20 in the SACE courses.

(Ruby, Interview July 2016) *I also received training in problem-solving as part of the Physics Olympiad in Year 12, which helped a lot in Specialist mathematics as the exam was unexpectedly tough that year. I had a very different approach to Mathematics Studies and Specialist Mathematics than my other SACE courses. With Physics, Chemistry, German and Musicianship, I cooperated a lot with my teachers and classmates and it was a team effort. With the mathematics courses I mostly didn't need help to understand the concepts. It was about executing under pressure.*

As Ruby's mentor and in my role as Head of Exceptional Learners it was evident that she responded positively to the pressure rather than fearing it. Determined to succeed and seeking perfectionism, her focus was on achievement rather than the learning process. There was no process, it was all about the product for Ruby, what she needed was to achieve at the highest level. She mastered the ability to interpret assessment rubrics to ensure a perfect result.

Part of managing Ruby was encouraging her to broaden her interests and studies rather than accelerating and finishing schooling early. This was partly to give her an opportunity to develop interests in alternative strands other than mathematics and science but also for her to develop physically, socially and emotionally. Ruby was afforded the opportunity to access counselling services throughout her schooling but chose not to do so. Ruby felt she was in control and viewed the need for a counsellor as a potential weakness. Her natural arrogance could view such 'help' as beneath her. Part of my role as the Head of Exceptional Learners was also to ensure the school counsellors were part of a continuing process of discovery about gifted students' social and emotional development as well as approaches to counselling them. School counsellors may not be aware that social and emotional aspects associated with giftedness may contribute to a number of concerns, such as extreme and denied emotions and problematic behaviors (Peterson, 2012); isolation or social anxiety (Peterson, Duncan & Canady, 2009), especially for profoundly gifted individuals (Gross, 2004).

LESSONS LEARNED

Acceleration, Understanding Giftedness

'I have never had the privilege of teaching a gifted student before.'

(Ruby, Interview July 2016) *In Year 10 I finished SACE Year 12 Physics and Mathematics Studies with Merits in both. No state prizes though. I took Chemistry with my age peers. I was accelerated into Year 12 Biology at Year 11 as I had a subject free that year. Otherwise I wouldn't have considered taking Biology.*

By the end of the year, the science teacher who was opposed to Ruby's acceleration to his class was not only open to acceleration in the future but stated **(Mr. P, Interview September 2016)** 'You have given me an opportunity to work with a unique student, thank you for pushing me so hard because otherwise Ruby would not have been given this opportunity and I would have missed out on teaching such a remarkable student. I have never had the privilege of teaching a gifted student before.'

Consequently, Ruby went on the following year to achieve a SACE score of 20 for Physics, and also accepted a SACE merit award for the subject at 15 years of age.

(Mr. P, Interview, September 2016) ‘This experience was critical in shaping the beliefs and views of the teaching staff. Many well-meaning staff were skeptical and the notion of accelerating two years was far outside the conventional timetable and year level boundaries of mainstream schooling. Not only did Ruby’s success in this Senior science class lead to further acceleration for her, it opened opportunities and creative possibilities for many other students to be given consideration for acceleration in the future, and most importantly for the school to be able to openly facilitate this with less resistance. I have become much more open and positive in regard to what I deemed radical acceleration, believing that such pathways are not viewed as optional but mandatory.'

It is not merely a teacher’s responsibility but duty of care to ensure that their charges experience the challenge yet support of educational opportunity. This was a privilege, a lesson learned for both student and teacher.

Gross (2005) stated, ‘Radical acceleration is a successful, yet rarely utilized educational practice that assists educators in meeting the cognitive and affective needs of highly gifted students’ (p.154). Gross noted that while research supports the use of radical acceleration some concerns about the process have been identified. To alleviate these concerns, support, and provisions such as counselling, study skills programs, and opportunities to foster social interaction with other students are suggested.

PLACE AND SPACE

Perfectionism

'I wish I could have let myself be creative!'

When it came to the interview process, the authenticity of conducting interviews at the original site of Ruby's educational experiences, proved valuable. For Ruby in particular, the surrounds not only conjured memories but emotions. This was especially evident when her physical senses were prompted and awakened through various stimuli and triggers. These included visuals such as the Music Centre which remained unchanged; a safe place for Ruby despite her creative side being challenged. The GATE room which Ruby visited frequently, was a source of fond memories because it acted like a drop-in centre for her; a safe house of sorts, where she felt comfortable and had teachers to listen to her vent her frustrations, so she could leave... 'ok' again. The gymnasium, however triggered some frustrations for Ruby as this was the place she truly felt so out of place physically and emotionally; sport was something she was not naturally good at. She felt like a bit of a failure because sport performance was something she could not control. And of course she relished the sound of voices from language classes like those which she once attended, because they created both a sense of belonging and challenge. She decided to take up German in Year 8 after studying Japanese throughout primary and reaching level N1, the highest proficiency level. She chose to learn German as she was fascinated with the origin of words and desired a new challenge in senior school. Her fascination with the origin of words came from her early success and focus on spelling.

We ordered lunch at the canteen where Ruby recalled that the aromas were still the same. We sat and ate at the same table and chairs where Ruby once did, amid the same noises of students playing and the clash of lockers and then the sounding of the bell, like an alarm, signalling the change of lessons; Ruby cringed as she acknowledged that *this symbolised the lack of flexibility in the day which she so craved*.

Tapping into Ruby's senses further revealed a reflective stance, both melancholic and joyous. Upon taking a walk around the school, to reintroduce her to the environment in

which she both struggled and thrived, Ruby was predominantly quiet, commenting only when it was evident that something had struck a chord with her. The school library where she spent a good deal of time was an apparent 'positive' with academic associations, the school playground was seemingly less positive because it conjured social and emotional associations.

In specific classrooms Ruby was eager to point out the similarities and differences within the physical spaces she once frequented. Ruby remarked that although the whiteboard had been replaced with a smart board, the original timber desks were no longer, and the seating arrangement was different, the essence of the classroom 'feel' was the same. Walls lined with student work proved welcoming as Ruby skimmed over and examined more closely the offerings on display. I surmised Ruby was noting the quality and hence skills level of the students, so I asked her what she was thinking.

'Sometimes I wonder if I would have had more fun at school if I had maybe not cared as much about the quality of my work. Especially Art in primary school… I wish I could have let myself be creative!'

Ruby's awareness or consciousness of her inability to 'let go' at times appeared to be more fleeting than fixed. The dichotomy of freedom and responsibility although not overt, was underlying.

SPORT AND ALL THAT

Belonging, Striving to be the best, Individualism

Let's face it, you can't be good at everything.

(Ruby, Interview August 2016) *I may have looked a little unnatural… but it didn't stop me from trying to perfect my technique; I recall practising with Mum all weekend throwing and catching, all to get a better PE mark.*

I loved watching the football and wouldn't mind trying cheerleading but that's about it!

Sailing is also a favourite pastime of my parents and grandparents and Dad named his boat 'Ruby' after me. I feel free when we are sailing… the only pressure is the life jacket

around my chest, and which Dad insists on my sisters and I wearing. 'You might be a bright little button Rubes, but you can't swim to save yourself, so keep it on!' He often joked.

(Ruby's parents, Interview September 2016) 'We were always intent on ensuring all of our children had broader interests and skills and we actively pursued additional activities outside of school. We recognised Ruby was not blessed with sporting ability but we always encouraged her to participate even though she avoided it at all costs'.

Gross (1993) found in her study of profoundly gifted students that the families were 'child centred' (p. 239) and that parents very much aware of the children's hobbies and interests, and family life tended to be arranged around their enrichment and extension activities. Hertzog and Bennett (2004) noted that families view their gifted children's learning needs through the personal lenses that reflect their values.

(Ruby's parents, Interview September 2016) 'Ruby's learning needs were individual in nature, and quite different from her siblings. We were very sensitive to the personal, emotional and social needs of our children throughout their formal schooling and we would continually seek out well-rounded experiences for them, such as activities in music, drama, relaxing at home, family recreation activities and trips.'

As researcher, I noted from the interviews and ensuing narrative that Ruby's parents were invested in ensuring the best possible outcomes for her and her siblings and were extremely realistic about the nature and scope of mainstream senior schooling for Ruby. The relationship was positive and collaborative with the family. Her mother was an educator herself which I believed assisted in the success of the relationship between school and family. She was actively involved in her children's education and in school events. Ruby's father was supportive of all his children, understanding and nurturing each of them individually with their own unique talents.

Parents have so much valuable information to share, and as educators we need to ensure we facilitate this communication and give parents an opportunity to be heard. Ruby's parents regularly made appointments with the teachers, attended school

functions and participated in school committees. Ruby's mother was a key contributor to the Friends of Music which provided a bridge for constant interaction and communication between the family and the key stakeholders in the school.

Ruby's parents greatly facilitated their children's development by helping them cultivate a positive attitude toward learning as well as a sense of self-confidence. This was done by modelling an appreciation of knowledge and the value of learning. This often took many different forms such as performing arts, sciences, sports and leisure activities (Coffey et al., l976; Ginsberg, 2012).

Ruby's parents continually encouraged and supported Ruby as a means of instilling self-confidence. She acknowledged her lack of skill in the area of physical education but was determined to improve. Ruby could at times be critical of herself which, I was aware, could be a manifestation of her perfectionist tendencies. With her very high standards this was a concern, but her parents were always there in the background supporting her.

Whilst Ruby maintained her focus on the attainment of perfect grades in her subjects, the physical reality of sports raised her pragmatism; in that her weakness in that area was not necessarily a failing and it may in fact have relieved the pressure of expectation both from herself and others.

ON PERFECTIONISM

Living up to expectations, Perfectionism

Am I perfectionist? Perhaps I am. I have to be after all, don't I. I am in Year 12!

(Ruby, Interview July 2016) *Still in primary school I was becoming more acutely aware of what it meant to be a perfectionist. I define perfectionism as wanting to do something perfectly to the point where you're not capable of doing it if it can't be done perfectly. I think I was an unhealthy perfectionist in primary school, because most of the things I encountered I could do perfectly, I wasn't keen to do anything that couldn't be done perfectly. This started to disappear in Years 5 to 7 because we were given more open-*

ended tasks, where there was no perfect or right way to complete them. This was good for me as it helped me turn my perfectionism into doing as well as I could, rather than doing everything perfectly.

Another thing that helped me to learn how to channel my perfectionism into something healthy was competitions. Timed contests such as the Australian Mathematics Competition (AMC) weren't about solving the problems in the most perfect manner, but about using the time you have to maximise your score. I still used some perfectionist traits in competitions, but from the first years of University New South Wales competitions (Years 3-4) I tried to pair this with a good exam technique. I quickly learnt not to get hung up on questions I couldn't get immediately, and move on to the next question. Once I'd done all the easier questions I'd go back to the more difficult ones. So that helped me learn how to avoid the paralysing aspects of perfectionism. The more useful aspects, such as attention to detail and not stopping until I'd given myself the best chance at a perfect score, I used to my advantage. It was helpful doing a range of timed competitions. The UNSW competitions I needed to be very close to a perfect score to get a medal, whereas the AMC competition had a series of more difficult questions at the end, which required a less perfectionist and more pragmatic approach to time management. This was probably why I didn't get an AMC medal until Year 10.

(Mr. T., Head of Mathematics, interview October 2016) ‘Ruby always dwelled on the minutest details and so for any assessment I ensured my marking and allocations were spot on. She was always challenging me and sometimes I found this intimidating. She seemed unaware of her surroundings at times and often insisted challenging a test result at the most inappropriate times’.

In high school I was seen as a perfectionist, but I saw myself losing my perfectionism in high school in favour of doing what I needed to do in order to get what I wanted. I was very relaxed about the quality of my work in subjects from Year 10 or below, I'd just do the best I could without pushing myself too hard or using too much time. Ironically given perfectionism is usually seen as a negative trait, I felt my teachers were far less impressed with me when I wasn't appearing as a perfectionist.

In Year 12 this looked very similar to perfectionism because I needed a lot of attention to detail to achieve the results I wanted. But this also meant I stopped trying to be perfect in every subject.

Given many staff and peers already had me stereotyped as a perfectionist, any attempt by me to break out of that was interpreted as laziness or arrogance. This was probably the most difficult part of learning to manage the perfectionist tendencies I had, was trying to deal with other people's expectations of when I should be a perfectionist and when I shouldn't, and that they didn't always line up with what was productive or useful for me. I feel this might be a common theme for gifted students, as the academic scholarship kids in our school were all seen as either 'too perfectionist' or as 'lazy underachievers' at times, which made it difficult to trace an acceptable middle ground.

I mean it was not like I was always looking for perfection, just to understand things satisfyingly. If I were a true perfectionist I'd procrastinate. I'd do anything to achieve a goal I really wanted. If there was any kind of competition, official or unofficial, I'll lift my game to make sure I won.

Am I perfectionist? Perhaps I am. I have to be after all, don't I. I am in Year 12!

I have to take a perfectionist approach because it's what I have to do to increase my chances of a perfect ATAR.

I won the scholarship!

Schuler (2000) discussed performance perfectionism, in which individual worth is connected to success, and argued that many students who experienced neurotic perfectionism believe failure is abhorrent because their self worth equates to their poor performance. Ruby was very driven and she measured her success based on her grades or scores. Ruby's perfectionism was generally a healthy aspect of her life resulting in positive growth, although it bought with it challenges including heightened anxiety and expectations. As she matured Ruby developed a broader understanding of her perfectionist traits, giftedness, and self-awareness, using them to her advantage and essentially to be the very best.

IN SHORT

Individualism, Isolation, Independence

(Ruby, Interview July 2016) *I never really found the connections I craved until I went to university. If I reflect on school I was successful academically, I had friends and I was fortunate enough to have attended schools that dedicated resources in the form of staff and programming to support me where they could. I felt like much of school I was a loner on my own journey that was so very different from everyone else. When I was in mainstream classes with my peers I was bored and often pretended to be engaged, pretended not to know the content just to fit in. There was a fair bit of time wasting. So often I had to choose between boredom and loneliness because my accelerated program took me to different year levels classes and contexts where I did not have any friends. The accelerated program was ok, but it was really just content from another year level and I could have done that in my class. It was like working in a silo and this drew me further away from my peers, however my goal was always something bigger...*

(Ruby's mother, Interview November 2016) 'My eldest just got news that she will be awarded a University Medal at her graduation from Adelaide University! Thanks to Kylie Booker, those who took the risk at ----- College (they know who they are), and the awesome teachers at ----- Primary who forced us into this amazing intellectual journey.'

Ruby made no apologies for her intellectual superiority nor did she feel the need for modesty. Ruby did not suffer from tall poppy syndrome, with herself being the tallest poppy.

Chapter 5

Discussion, Implications and Recommendations

5.1 Discussion

Wolff (2017) discussed how stories we tell shape our sense of self and the meaning we make out of our circumstances and experiences. This research provided the opportunity for a profoundly gifted student Ruby as the main participant, to explain and interpret her lived experiences throughout the years of her formal schooling.

Beattie (1995) discussed how narrative studies can provide opportunities for individuals to find their voices and tell their stories of experience, as well as listen to and honestly hear the voices of others. Beattie continues by proposing that reality depends upon human interpretation, so it follows that narratives are not only the most appropriate choice to study the phenomenon of a profoundly gifted student in mainstream schooling, but they also provide a way of understanding based on the experiences of those immersed in its natural context (Spector-Mersel, 2010) of today's mainstream education system: a gifted student herself, as well as teachers and family of the gifted student.

In order to provide supporting evidence and understand the perspectives of the participants, direct quotations were used throughout the study. These direct quotations provide rich descriptions and help support the findings of the study. The quotations and excerpts also contribute to the descriptive nature of this qualitative research.

The stories derived from the narrative approach employed in this study allowed participants to speak of their experiences without quantitative constraints, meaning the participants were able to answer open ended questions without the limited options they would be afforded with quantitative research methods. The limitations of quantitative research lie in the absence of individual experience.

Through her storytelling Ruby was empowered, gaining a control perhaps ironically not always enjoyed. She was able to make some meaning of her narrative, and in simply telling it, appreciate the greater sum of all parts. Van Manen (2015) argued *'modern thinking and scholarship is so caught up in theoretical and technological thought whereas a phenomenological human science approach may strike an individual as a breakthrough and liberation' (p.33).* This held true for Ruby because when given the opportunity to tell her story she was able to determine meaning out of her unique circumstances and experiences in mainstream schooling.

5.2 Research Questions Re-Visited

5.2.1 The Overarching Question

How does a profoundly gifted student reflect on and understand her academic, social, and emotional experiences and perceptions of mainstream schooling at various stages from Year 1 to Year 12, and how does she describe her experience of school-wide provisions and strategies?

'Lived and told stories and the talk about the stories are one of the ways that we fill our world with meaning and enlist one another's assistance in building lives and communities' (Clandinin & Rosiek, 2007, p.35).

Ruby reflected on her keen desire to work by herself and showed she was acutely aware of how she worked best to achieve her goals. This resistance to working in groups was evident in all subjects and at all year levels. This reluctance was often perceived as arrogance by her peers and the teachers. Ruby's frustration often stemmed from forced collaboration with her peers where she felt that less able students were letting her down and impacting her progress and achievement. Ruby pre-determined what the teachers and ultimately the examiners required, and her motivations were always focused on ensuring she delivered her best work. In the instances where she recognized a weakness, she would respond by engrossing herself in that skill or content until she deemed it was no longer a weakness. An example of this was her lack of creativity in music, where her response was to practise until her pieces

were played flawlessly to ensure examiners could not fault her playing technically. Additionally, Ruby was open and public in her recognition of her strengths and ensured she capitalized on these throughout her schooling.

Ruby was very aware of the complexity of her thinking. She had a greater understanding of differences in her own thinking related to differences in the tasks and identified possible steps to advance her own learning. As she matured, she came to understand and appreciate differences in the problem-solving processes and abilities of her peers. Ruby indicated a strong desire to control her learning, she sought autonomy in all aspects of her academic schooling. Ruby demonstrated a high level of metacognition by being able to describe how she understood her own learning and identifying skills she could use to maximize her performance. This could be described as having awareness of her own self-regulated learning.

Ruby, being intensely competitive, sought to be acknowledged in public which often translated to social isolation as her teachers and peers found her lacking in humility. Her competitiveness, her cunning strategies which she described in the poem analogy served to confirm the validity of her performance. Ruby put pressure on her teachers to ensure she was effectively prepared for her assessments and competitions and chose only to compete in individual competitions where she could ensure a winning result. Ruby measured her success in relation to her school grades and her competition results. She recognized the value of goal setting and was intent on continually re-evaluating and re-setting goals based on her performances.

Ruby openly reflected on her perfectionistic tendencies. She personally did not see these as a negative but expressed the view that her perfectionism supported her drive for high performance that would meet her realistic, but high goals. With high performance came expectations. She admitted to feeling anxious about living up to her own expectations but not for her peers and teachers. She stated that her parents were very supportive and that she never felt the pressure of their expectations. She noted her parents celebrated her high achievements in the same manner as they did those of her siblings.

Ruby conceded that her perfectionism often put her under pressure and led to anxiety when time management became an issue. Attending classes that she deemed, '*were a waste of time'* further extenuated her frustration and anxiety.

(Ruby, Interview January 2017) *Given many staff and peers already had me stereotyped as a perfectionist, any attempt from me to break out of that was interpreted as laziness or arrogance. This was probably the most difficult part of learning to manage the perfectionist tendencies I had, was trying to deal with other people's expectations of when I should be a perfectionist and when I shouldn't, and that they didn't always line up with what was productive or useful for me.*

Whilst Ruby was afforded some autonomy particularly in the later part of her schooling, she viewed school as a restrictive place. The bell signalled and represented a lack of flexibility in structure and content which she craved. What made her most anxious was that she was asked to learn content she already knew. She grappled with understanding how it was that her peers did not understand such simple concepts. There was a point where she explained that she took on the responsibility of a class mentor but found it 'painfully frustrating although somewhat rewarding at times'. She explained that class mentoring was productive in a sense, but also led to her having some inner anxiety due to the lack of intellectual stimulation and progress in her own learning. Ruby also noted her resentment when asked to complete additional work because she had already completed work asked of her.

She expressed her annoyance that the schools she attended valued hard work more than talent and complained that grades were sometimes awarded subjectively which she found hard to comprehend. Ruby expressed discomfort about assessments that required some form of subjective assessment and said that she craved objective assessments where she had control of the outcome. Ruby conceded this was a catalyst for her anxiety and frustration because it was simply something she had very little control. She described how many of her confrontations with teachers were linked to what she felt was inappropriate assessment feedback and grades.

Ruby reflected on her teachers over her schooling and noted her favourite teachers were those that afforded her the opportunity to participate in programs in which she was interested and engaged. She expressed her craving for autonomy and ownership of her learning. In secondary school she expressed annoyance with the inflexibility of the MYP (IB Middle Years Program) which had a very lock-step approach which led her to feel sense of entrapment. The opportunity for radical acceleration from middle school subjects into senior subjects gave her a sense of relief and hope and she commented that this was the pivotal time in her schooling when she was most content. Whilst radical acceleration meant she was even further isolated from her peers, she found that she was intellectually connected with her new peers in the accelerated classes. Ruby's study plan, although complex, afforded her greater responsibility which she preferred. She noted that she participated in a number of enrichment opportunities but after Year 8 chose not to attend the weekly withdrawal program as she did not necessarily share similar interests or ability with the gifted students in the group and felt that her time was better spent on her accelerated subjects.

Ruby acknowledged that her mainstream schooling experience was heavily reliant on teachers' attitudes, knowledge, and skills, in relation to gifted learners. She reflected on both negative and positive experiences of her schooling and made particular mention of her experiences with a number of teachers. It was noted that most of the highlights she mentioned involved a special teacher with whom she connected strongly or a program she was passionate about.

Research has consistently shown that effective teachers influence student performance and achievement (Jepsen, 2005). In this research, Ruby indicated a number of teachers supported and facilitated her high achievements and performances by providing her with the opportunities, choice and autonomy to explore, extend and excel.

In being so goal directed, Ruby was relentless in achieving the highest marks possible, as that was '*what universities wanted*.' All the activities Ruby participated in, Senior Band, Gifted Mindchange, and advanced university placement courses, were purposeful; leading and contributing directly to this desired goal of gaining a scholarship

from a prestigious university which she was successful in achieving. Self-described as intense and serious, Ruby appeared happy and comfortable with her choices. She preferred self-directed learning, either from herself or her teachers, rather than working with others. She justified this choice as allowing her to stay on track to attain her goals. When Ruby reflected on her schooling she challenged the conventional schooling system experienced in her early years. This experience enabled her to understand what she wanted, the system and how she could manipulate it to be successful in achieving her goals. She recognised the need to build relationships with her teachers and community mentors in order to support and advocate for her to ensure the pathways she desired.

Interestingly, Ruby whilst accepting the gifted label, did not view herself as a gifted student like everyone else did. Rather she saw herself as hard working, and worthy of the achievements awarded to her. She observed, however, that she often felt her achievements were not recognised because they were expected. Despite the innate nature of her exceptional ability, Ruby's conscientious approach was for her just that, a conscientious approach; that is one which required a sincere and determined effort not merely to be successful, but to be the best.

Being identified as gifted, Ruby explained, gave her extra opportunities especially being in gifted education programs. Meeting new people and discovering what she could do heavily impacted her experiences at school. She indicated a sense of connection and belonging to a particular group of students. Whilst she recognised this, she indicated there was an absence of genuine like-minded peers throughout her schooling. She noted her university mentors and school mentor were significant in enabling her to manage her learning pathways and navigate through the frustrations and challenges of mainstream schooling.

Her interest, engagement, and achievement, in any given subject, were almost entirely determined by her relationship with her teacher and whether there was mutual respect between them. She worked hard to develop and preserve that relationship even feigning to construct questions in an attempt to convince certain teachers of her interest in what

they were teaching. Ruby highlighted her need for intellectual stimulation through challenge and complexity. If this was not provided, she created her own challenges and goals aligned with the teacher' expectations. However, if her teacher did not support the goals she constructed her engagement and achievement tended to suffer.

Ruby noted that her intensity for learning was not shared by many of her peers. She thrived on meaningful challenge, despising busy work that was not connected to anything meaningful or relevant to her or society. For Ruby, the learning environment needed to be respectful, provocative, and diverse. Having the opportunity to be exposed to such a learning experience, it was more obvious for her when it did not occur and this realisation fuelled her frustration. Her various experiences caused Ruby to look inward and access where she was, where she wanted to be, and what she needed to do to get there. She conceded when reflecting on her senior school years that she may have been a little intense for her teachers and peers and that competitiveness overtook her at times. So much so, that she indicated feelings of uncertainty, anxiety and self doubt and then responded to these feelings by studying more.

Ruby was particularly sensitive to external stimuli, and she had extraordinary processing capacities for cognition, emotional intensity and depth, and profound imaginal qualities. Her potential for unique internal experiences, while capable of creating exquisite feelings and peak experiences, caused her some difficulty which included her anxiety and feelings of uncertainty. This extraordinary concentration of mental energy resulted in Ruby experiencing life intensely.

Ruby commented: *I often had mind override, I use the analogy of a tornado where I felt like I was overthinking everything. I would have to anchor myself down until the storm was over and it took me a long time to work out how to do this.*

As Ruby became more aware of her anxiety and 'overthinking', she conscientiously worked on strategies to manage this using meditation techniques and distracting and neutralizing her thoughts by burying herself in her music performance practice. She noted that it took her many years and maturity to successfully achieve this.

(Ruby, interview August 2016) *I had trouble sleeping, I could never turn my brain off, it was exhausting but exciting all the same. My parents tried everything to help me, but I realised I needed to help myself.*

Ruby found it challenging when discussing her own giftedness. Whilst she acknowledged her academic giftedness she was very uncomfortable with the label and was only told she was gifted quite late at eleven years old. However, she conceded she knew she was different not only from her peers but also her siblings. Ruby communicated that at some points in her schooling she experienced the weight of expectation to perform in a particular way because she was identified as gifted. She reflected that sometimes this made her uneasy because there were assumptions that she would participate or represent the school in some competitions that she had little or no interest in but never-the-less there was an expectation she would perform. Carman (2011) identified that gifted learners are expected to engage in particular activities and perform at high levels universally across all domains. Whilst this is the expectation, gifted students, and in particular profoundly gifted students, often have asynchronies across domains (Jarosewich et.al., 2002) where they may excel cognitively but lack social and physical skills.

Ruby reflected that she often got caught up in the swell of self-evaluation and prediction of others' assessment of her. Whilst she reflected that she was quite hard on herself, her concern about how others assessed her was just as important to her. As she matured into secondary school she reflected and indicated there was a shift in her thinking, and she was far less absorbed in what her peers and teachers thought of her and what drove her was her own self evaluations. Ruby continually reflected on her performance and adjusted and reset her goals accordingly. Often these goals, whilst realistic for Ruby, presented challenges for traditional school structures. In particular, when Ruby was completing her Middle Years International Baccalaureate program, she was explicitly required to complete a select number of years and hours in each course which Ruby was unable to achieve due to her accelerated and modified program.

It was quite apparent from the data that Ruby's relationships with her teachers greatly impacted her experience of schooling. The establishment of mutual respect brought a level of trust for Ruby, making it safe for her to be herself, to show her challenges and possible weaknesses. Teachers who demonstrated caring towards her seemed to motivate her through learning tasks that would not have otherwise engaged her but she would have felt an obligation to complete.

Ruby's mere presence in her school and the need for radical changes to be made to the delivery and structure of the curriculum prompted new policies and provisions within the schools. These accommodations could benefit future students having similar needs to Ruby's. One of her siblings noted that her school experience had been improved due to programs and provisions that had been created to accommodate Ruby's learning needs. It can be concluded from this that one individual's experiences, actions and reflections can influence the actions of others.

5.2.2 Sub Question One

How does a profoundly gifted student reflect on and understand the social and emotional impact of her giftedness in the contexts of school, family and relationships?

'If they wish to satisfy their drive for excellence, they must risk sacrificing the attainment of intimacy with their age peers' (Gross, 2001, p.343).

Ruby's gifted experience emulated the findings of Blaas (2014) that gifted students may experience an array of social-emotional difficulties, such as peer isolation and exclusion, depression, anxiety, and perfectionism. Ruby acknowledged that she felt profoundly different from her peers and consciously made a decision to choose between her needs for peer acceptance and her overwhelming drive for academic achievement (Jung et.al., 2012). In choosing to satisfy her drive for excellence, Ruby openly acknowledged that she forfeited the attainment of intimacy with her age peers. She conceded that throughout her entire schooling she had friends, but she never had any friends she considered close. She admitted that while she would interact with her peers it was generally on a superficial level. Ruby acknowledged that she chose her own journey and that journey happened to be different from everyone else. She highlighted

the difficulty she had making friends because she was always attending a number of classes across a multitude of year levels so her class peers really did not know her. She conceded that she made very little effort to make connections in class because she was there to learn and excel, not make friends. Ruby reported times of being isolated and excluded from her peers as a result of her radical acceleration and competitive nature. She expressed anxiety and sometimes frustration due to timetabling conflicts with her courses and special programs. These difficulties sometimes isolated Ruby from her chronologically aged non-gifted peers and in some cases impeded her ability to form healthy relationships. She openly admitted to be socially awkward and accepted that some peers found her intensity too much. She didn't tolerate adolescent banter and concluded most of her peers were too immature for her. Ruby noted the conversations between her peers were often 'shallow and immature and not worth engaging in' Ruby did admit that her open and honest feedback to her peers did not assist her to secure friendships and isolated her further. Ruby noted, 'friendships that were successful' occurred in areas of her schooling where she had high performing peers such as in music where she was not considered the best musician. This seemed to normalize Ruby in the eyes of her peers. She commented that she felt different in music, she felt a strong sense of community and belonging and enjoyed the opportunity to tour with the music students.

Ruby noted that her perfectionistic tendencies were not due to perceived high standards of her parents or her peers but in most cases were driven by herself. She disliked change in routine and expressed deep anxiety about performance and achievement and said that it was driven by her desire to be the best. Ruby recognized that she was unique and acknowledged that she viewed the world quite differently from most of her peers, which brought with it great satisfaction and excitement as well as anxiety and frustration.

Ruby expressed the need for mutually respectful and caring relationships with teachers. Whilst she acknowledged that certain teachers were challenged by her intensities, obsessions, attention to detail and, sometimes dogmatic attitude, she conceded that she needed them in order to realise and achieve the goals she had set. Ruby realized

quite late in secondary school those around her including her teachers and peers were a means to achieving her end goals. This realisation came with maturity and when she acknowledged this, she was much more at ease in her interactions at school and home. She believed having autonomy in her academic pathways gave her a greater sense of control and inner peace.

When reflecting on the social and emotional impact of her giftedness on the family, Ruby noted that she grew up in a close family with positive sibling relationships. She conceded that her inability to understand other perspectives and views caused some conflict in her family and often led to heated debates. She understood from a very early age that she was a concern for her parents and that her behaviours were deemed unacceptable by her teachers. She indicated that she was relieved when her parents were able to reconcile why she behaved and felt the way she did, and that this inadvertently took pressure off her. Her parents became advocates for her in her journey to some kind of 'normal' way of being.

Ruby acknowledged that she struggled with inner conflicts and that dealing with her oversensitivity to situations and events unsettled the dynamics of her home. She acknowledged that she found it hard to sleep, conform to routines, and, accept anything less than perfection, but also recognized that in all this, her mother played a crucial role in assisting her to navigate through her schooling.

Ruby indicated the pressures both overt and hidden on both herself and the other participants including educators and family members throughout her journey in mainstream schooling. She acknowledged her drive to perform at the highest level put unnecessary pressure on her, but that teachers also had unrealistically high expectations of her because of her gifted label. Ruby acknowledged her difference and commented on security and insecurity she found in being who she was. She also commented on her lack of social connection and cohesion with others, especially her peers. However, she was quick to point out as she got older she was not particularly bothered by her social 'lacking' but rather more concerned with academic interests and

pursuits. She acknowledged her academic intensity and drive could have been a compensatory mechanism for her lack of connection with her peers.

Appropriate academic challenge was critical for Ruby. She acknowledged that she was not gifted "across the board" so she needed more challenge in some areas than others. In her areas of relative weakness like Physical Education and Music, she claimed *'she could do the regular program work*'. However, if the work did not provide enough challenge, she wanted the scope to make it more multifaceted, typically through more advanced content and/or producing a more complex product. Hébert and Schreiber (2010) noted that gifted students need challenging meaningful work and when they do not get it, they either engage minimally or disengage entirely. Ruby reflected on her school experience and her future self and said she desperately wanted to connect with the world in a meaningful way and make a positive change in it. She reflected on the way she looked at issues critically but then become stressed and frustrated when she felt she could not really make a difference and had to accept social conventions as they were. Ruby found niches in music and theatre which allowed her to demonstrate another way of 'being' herself. When participating in music and drama Ruby was successful in making social connections with her peers which she wasn't able to do in other areas. Part of this Ruby attributed to being *'more normal'* or '*just average'* in these domains.

5.2.3 Sub Question Two

How do educators reflect on the experience of educating a profoundly gifted student?

'About school teachers' attitudes towards basic principles of gifted education like acceleration, enrichment, and differentiation, little is known' (Endepohls-Ulpe, 2017, p. 152).

This research provided the opportunity for seven teachers, including the researcher, to construct narratives to explain and interpret their lived experiences of educating a profoundly gifted student in mainstream schools. The narratives provided a contextualized and integrated understanding of teachers' beliefs, knowledge, and lived

experiences working with the main participant Ruby, that may develop new understandings of the practice of educating profoundly gifted students.

As unique individuals with their own personal beliefs, the teachers in this research responded to interview questions that related to particular stages of their teaching careers. It cannot be assumed, however, that a greater number of teaching years equated to greater aptitude and interest in teaching such students.

Teachers played an influential role in Ruby's whole educational experience. The ability to meet her academic needs was critical as teachers sought to provide an appropriate curriculum. Ruby was schooled with three very experienced teachers who had fixed views and it took some time for them to adjust, understand and provide the provisions and strategies appropriate to her needs. In contrast, four of her teachers, three new to teaching afforded Ruby more flexibility and choice early in her schooling and she responded positively to this approach.

Consistent with the findings of Worrell (2009), the teachers in this study reported interactions along a continuum from supportive such as providing differentiated instruction and challenge for Ruby, to not meeting her needs by having her complete the same work, even when teachers acknowledged that she had already mastered the material. Lack of understanding of the unique needs of gifted learners may have prevented some teachers from identifying these needs in Ruby.

The results indicated, professional development opportunities in gifted education were limited, very few teachers had completed any undergraduate teacher education specifically on gifted learners and some teachers indicated they lacked the understanding, expertise and knowledge to cater for exceptional and profoundly gifted students in their classroom.

The consistent themes that emerged from the data were that teachers expressed low self-efficacy for instructional practice to work with gifted students and an inability to meet the unique needs of a profoundly gifted student. In particular, they needed advice about differentiation, radical subject acceleration and expressed the view that they

needed professional development and teacher education to help them meet the needs of gifted, and especially profoundly gifted, students.

Ruby's teachers noted the challenges, as well as the triumphs, when teaching and mentoring her through her schooling. A number of her teachers indicated feelings of inadequacy when they tried to understand Ruby's needs. They expressed a desire to meet her needs but found that their lack of understanding and low confidence in teaching a profoundly gifted student impeded the accomplishment of appropriate learning outcomes for Ruby.

The results of this narrative research support the findings of previous research in the field of gifted education and specifically research with teachers of the gifted. It indicates that teachers working within an education system and acting on their own experiences and beliefs but doing this in the absence of education may influence the opportunities presented to gifted students. Teachers' beliefs regarding catering for individual differences and knowledge of the needs of gifted students play an important role in how they respond to the challenge of educating these students.

Gifted students, due to their advanced intellectual capabilities may be even more dependent and influenced by their teachers because they rely on them to provide for their specific academic and emotional needs.

When the findings of this study are compared and contrasted with published literature in order to situate the new data into preexisting data (Baxter & Jack, 2008), a new understanding emerges of teachers' lived experiences working with a profoundly gifted student.

The conclusions drawn from the results indicate the importance of positive teacher self efficacy, the strong belief that the teachers can succeed in providing the appropriate provisions and environment for profoundly gifted students. This coupled with support and professional development to ensure teachers feel they have the knowledge and understanding to succeed given the unique opportunity to teach a profoundly gifted student.

The results of this study must be interpreted with caution due to the small sample size of the participants. The findings cannot be extrapolated to all teachers, as the findings might not be transferrable or generalizable to other schools educating gifted and profoundly gifted students.

5.2.4 Sub Question Three

How does the family of a profoundly gifted student including her siblings, perceive the student's schooling experiences?

Koshy et.al. (2017) noted the importance of engaging parents in the education of their 'high potential children', and in this research the researcher was able to analyze and explore parents' lived experiences of raising a profoundly gifted student and the experience of her two siblings both of whom were also gifted.

The overarching theme in the account of these parents of parenting a profoundly gifted child was that a sense of belonging within the learning environment was vital to Ruby's well being throughout her schooling. Her parents recognised that Ruby suffered emotionally when she felt like she did not belong within her learning environment. Ruby felt a sense of belonging when her social, emotional and learning needs were met. Her parents discussed the importance of advocating for Ruby throughout her schooling and described the vital role they played in collaborating with Ruby's teachers and mentors to ensure appropriate provisions were made for her education.

Family dynamics, the roles people in the family play, and their beliefs about education and gender roles, impact how profoundly gifted children see themselves (Grolnick, Friendly, & Bellas, 2009). Ruby's parents were positively involved in her schooling. They supported their daughters' choices in programming and post-secondary planning. They expressed reasonable expectations that were appropriate to their daughter's interests and abilities. They accepted that Ruby's school experiences were twofold involving her cognitive and affective development, and reflected that they were able to make a significant contribution to her cognitive development due to having strong partnerships with both schools she attended. They were less confident when it came to

supporting Ruby through the turmoils of her personal experiences, and conceded that although this was not something they could control, it still worried them!

They reflected positively on the teachers' commitment and endeavours to provide Ruby with challenging learning environments, and acknowledged that Ruby was not an easy student because of her relentless persistence, her public displays of frustration and her unrealistic expectations of her schools, teachers and peers.

Her siblings were quick to reflect on Ruby's achievements and clarify that while they were potential rivals, they did not see themselves in this way but understood Ruby's unique needs and her differences. They accepted that her schools were providing accommodations that were beyond all other students at the school and they were relieved not to have the attention that she had commanded.

As stakeholders, Ruby's parents and siblings were uniquely aware of her emotional, social and physical well being, and how this affected her experiences at school. As could be imagined, the practical consequence of Ruby's characteristics in the home were positive at some moments, and less desirable at others. Ruby's siblings noted the challenges of being compared to Ruby and how this reflected on their own self-efficacy at school. They felt the that teachers had unrealistic pre-conceived expectations about their ability that ultimately placed additional pressure on them. They said that it took them some time to find their way and develop their own identity separate from Ruby.

When Ruby's parents reflected on their experience of parenting Ruby, they noted that they afforded her higher than normal amounts of independence, while providing her with strong support, relevant opportunities, and discipline. They were unashamedly focused on Ruby and had high, but realistic expectations for all of their children. They expressed the view that Ruby had difficulty developing socially and emotionally. These difficulties stemmed from differences in maturity and her asynchronous development (Rosenburg & Campbell, 2012) as well as issues with self-concept and perfectionism. They also discussed issues that Ruby had with anxiety and indicated that this stemmed from her perfectionism. She had an intrinsic drive for perfection and high performance which translated into extreme levels of anxiety. Her parents were quick to clarify that they had

strong work values as a family, but had no pre-conceived expectations of Ruby. They celebrated her success and failures as they did for all of their children. Ruby's parents admitted that her intensity was sometimes unsettling for the family but that all family members understood, respected and loved her for her differences.

Ruby's parents noted that in primary school Ruby purposefully separated herself from children of her own chronological age because she found other girls were too immature for her taste and that she could not deal with the constant drama they seemed to be involved with. They noted that her advanced maturity levels seemed to lead to increased levels of independence, and that Ruby always wanted to make her own choices and decisions even from a very young age. This propensity for independence later caused tension within the family dynamics because sometimes the independence she sought was beyond her age appropriateness and challenged their family values.

Ruby's parents stated that from a very young age she demonstrated characteristics of perfectionism particularly when it came to achieving high grades. She held very high expectations for herself which was not always healthy because high expectations were linked with severe anxiety and insomnia. Her parents reflected on Ruby's successes and, although proud, conceded that they were always worried for her wellbeing. When reflecting on the difficult first few years of her schooling, Ruby's parents felt that at times she suffered from severe anxiety because she did not have the maturity to understand and cope with her differences. They reported that she had relatively high self -esteem even though she had difficulty with social interactions.

One of Ruby's most difficult challenges was engaging with content that she was not emotionally ready to understand. Her parents described the difficulty she had when choosing an appropriate text to read at five years when her reading age was above 16 years. They talked about the trauma she experienced viewing the daily news due to the mature themes in it. Her heightened sensitivities led her to deeper thoughts that she was unable to resolve.

Ruby's parents indicated that she held higher expectations of herself than anyone else and that sometimes her perfectionistic behavior was not healthy because it caused

anxiety for her when she was trying to achieve perfect grades. They reflected that they always encouraged her to just do her best but for Ruby, that was never good enough!

5.3 Summary and Conclusions

This chapter discussed the findings of the study that explored the journey and reflections of a profoundly gifted student specifically her academic, social and emotional experiences in mainstream schooling. Investigating whether a student who is profoundly gifted believes she was educated successfully in mainstream schooling with radical acceleration and the support and advocacy of parents and mentors provides valuable insight into the life of the student. Findings from family and educators on the perceptions of Ruby's schooling experiences and educating Ruby were also included. The main conclusion I can draw from the results is that it is possible for profoundly gifted students to be successfully schooled in mainstream schools with appropriate provisions and a strong network of advocates including teachers, mentors, school leaders and family.

Although the findings are not generalizable to a larger population, they provide insight into the experiences of a profoundly gifted student and provoke questions about the kinds of experiences that are desirable for such students. This raises the question 'How can learning be provided that is responsive to an individual students' developmental levels, and in particular the needs of a profoundly gifted student? How can schools support the professional development of teachers to ensure a positive experience for profoundly gifted learners in schools?

Students like Ruby should be re-conceptualised as individuals, rather than one of "the gifted" to ensure appropriate services are developed (Rogers, 2007). The implication of this is that every gifted student presents differently and it is imperative that they are not considered a homogeneous group but rather as individuals. Prior (2011) supported the importance of knowing the student's perspective by calling for a qualitative paradigm with a mainstream focus on provision for and identification of 'gifted behaviours' because the regular classroom is where most gifted students will be situated. This is particularly pertinent for profoundly gifted students where a significant amount of literature indicates the regular classroom is unsuitable. For educators to reflect on and

understand a profoundly gifted student's perspective within a mainstream focus may contribute to further understanding of these rare students.

This qualitative research provided new understandings about a profoundly gifted student's experience of mainstream schooling by collecting the perspectives of a profoundly gifted student, her teachers, and her family.

Teachers played a significant role in the main participant's experience of schooling by determining the elements of the learning environment: the content, process, pace, product, and evaluation methodologies used. They held expectations of performance and defined success. Ruby's story indicates that it is important that resources are invested to provide appropriate education to empower teachers to identify and meet the needs of any profoundly gifted students in our schools.

Ruby, by her innate and acquired differences from age-peers found it difficult to connect with her peers. By her own admission, she found it very difficult to make connections with her peers throughout school and only experienced close friendships when she entered university. Ruby conceded that she concealed her love of learning, her interests which differed from those of age-peers, and her advanced moral development in order to fit in and conform. Ruby's intensity, intellectual precocity and intensity of personality made it challenging to understand and connect with her peers. She commented that her peers were more curious about her rather than genuine in getting to know her. She built peer relationships in Music and Performing Arts in her final years of school but again commented that these were really not close relationships. Ruby spoke fondly of her connections with her mentors and selected teachers as they better understood her.

The conclusion drawn from the results indicated that Ruby's perfectionism translated into positive achievement outcomes. Profoundly gifted students like Ruby may never find a close friendship in mainstream schooling due to the very nature of their profound giftedness and what is most important is to facilitate strong relationships with teachers and mentors. Intense competition and competitiveness may isolate these students further from their peers but also provides an avenue to challenge and drive the students beyond the curriculum. An additional conclusion drawn was a positive correlation

between family advocacy and student achievement connected with strong family values and expectations.

5.4 Limitations

Data collection in this study relied on the reflections of the main participant Ruby, and that of her teachers and family. Due to geographical constraints it was often difficult to gain access to participants, and a great deal of time was spent on organising interview times suitable for the participants to ensure they were not inconvenienced.

The findings of this study could also be limited due to the main participant being female and it could be that the experience may be different for a profoundly gifted boy or a profoundly gifted student who does not have a supportive family. Additionally, the educational provisions afforded to the profoundly gifted student in this study may not be extended to other students.

5.5 Implications

Profoundly gifted students

This research has implications for other profoundly gifted students because it may provide some clarification, connection and affirmation for other students with similar experiences. Ruby's academic journey and the provisions she was afforded may provide insightful information and opportunities for future pathways for other profoundly gifted students who may be in a similar situation in a mainstream school. Greater possibilities and open mindedness about what can be achieved to address the unique learning needs of profoundly gifted students may create more flexible learning opportunities and autonomy in pathways. Ruby's siblings noted her presence before them at school brought with it many new opportunities for enrichment and acceleration that were not previously available. In regard to social and emotional development, this study may serve as a reminder of the equal importance of affective development for profoundly gifted students in schooling. Advocates including parents, teachers and mentors need to ensure equal consideration is given to affective development throughout mainstream schooling.

Teachers

A better understanding of teachers' lived experiences in working with profoundly gifted students can inform the design of more effective professional development and teacher education. Teachers play an influential role in the educational experience of diverse, gifted students. However, as shown in this study, professional development opportunities are rare for practising teachers, and courses on educating gifted learners are not typically required for pre-service teachers. It is important that resources are invested to provide adequate training to allow teachers to identify and meet the needs of these students. As the demographics of schools continue to change and include a larger number of profoundly gifted students, school reform and increased teacher accountability, there is a need to develop teacher competence in the field of gifted education as it relates to educational equity for all students (Gentry, 2006; Moon & Brighton, 2008) including those who are profoundly gifted. The support to develop these teacher competencies may well be in the form of professional learning communities with up to date curated resources, activities and teachers with similar challenges and contexts specifically related to gifted students. The need for an advocate, someone to lead for the students once identified is vital in order to support the cognitive and affective development of the profoundly gifted students because without an advocate these students may not receive the appropriate provisions required to support their special needs.

Resilience is strengthened by recognizing that we are all experts in our own lives and we all have something to share with others. Part of this journey for Ruby was for her to begin to understand that words and stories can have a very powerful impact on others. This narrative helped Ruby clarify what was important for her. She discovered, when the facilitation of choice and autonomy was afforded her both at school and at home, she felt content and happy because she had some control of her pathways.

She commented, *'I never really knew how gifted I was, I always knew I was different, it was not until I was at school that I started realizing how very different I was when I compared myself to my peers. It was not a topic of any conversation at home, it was just who I was'.*

5.6 Recommendations for Further Research

This study is a catalyst for future research on profoundly gifted students' social, emotional and academic needs, as well as effective enrichment programming inclusive of acceleration throughout mainstream schooling. It is suggested that the most effective and appropriate theoretical framework for learning about students' needs is a more qualitative approach which contributes unique and valuable perspectives about student learning through detailed examination of their thoughts, feelings and experiences (Brantlinger, Jimenez, Klingner, Pugach & Richardson, 2005). The experiences of a profoundly gifted student from her perspective showcase dynamics operating on her both in and out of the classroom.

At the recent 22nd Biennial WCGTC World Conference in Sydney (2017) Professor James Watters (2017) in his keynote address delivered a strong message that it is not necessary for teachers to be trained in gifted education but that they must be passionate about it. In contrast Mark Scott (2017) from the NSW Department of Education spoke about the importance of formalised teacher education in the field of gifted education. The results of this study indicate that further research and attention to teacher training in gifted education would be appropriate for Australian teachers. Research into the impact of competition and competitiveness for profoundly gifted students is also an area that requires further attention. Udvari and Schneider (2000) noted there have been limited studies in this area and Ballam (2015) recommended that competition and competitive behaviour as perceived by a range of educators and learners could be considered in further studies.

(Ruby, Interview January 2017) *My parents, siblings, teachers, mentors and in some respects my peers all contributed to the success of my schooling. Ultimately my success was governed by my ability to adapt to a modern schooling system that was*

not quite ready for the autonomy and flexibility that I craved and required. I thank those that believed in me and advocated for change albeit the challenges.

On reflecting across her twelve years of schooling Ruby strongly preferred appropriate developmental placement, allowing the curriculum to move at a pace commensurate with her level of mastery, and as a young adult expressed many positive sentiments and few regrets about having had such experiences. She felt blessed that key personnel at both schools believed in her and gave her the autonomy to direct her own pathway. This she said was her 'lifesaver'.

(Ruby, interview June 2018*)* *Whilst I am special, like everybody else... my special needs were a little different to what one might expect of a gifted student.*

Rather, there is an expectation that as I am highly intelligent, achievements come easy to me, and that I am also socially and emotionally mature... resilient, patient and wise. Yet my special needs required special consideration.

My message for educators of students like me…

Be prepared to go the extra mile, be open to being unconventional, be willing to listen and eager to learn, be patient and positive, tolerant and trusting… that you are not alone but part of a team.

Please understand that being highly intelligent can mean being highly sensitive… to many things. Please go gently with us when diffusing a situation.

In our need to be extended… in our need to be the best, challenging us may prove challenging for you but challenge us all the same… grow with us. Provide choices, flexibility and autonomy where appropriate.

Share our high expectations but don't expect more of us than we expect of ourselves, because believe me that is a lot!

And lastly, please strive to differentiate without making us feel different as we already feel different we don't need this confirmed everyday!

Ruby's final message highlights the need for constant reflection, flexibility, empathy and understanding coupled with open-mindedness to constantly challenge the conventional school structures to cater for the unique needs of profoundly gifted students.

Finally, the critical role of Ruby's parents and siblings (Vialle, 2017) and the influence of Ruby's school environment including teachers and peers on the development of her giftedness was acknowledged (Olszewski-Kubilius, 2014).

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Appendix A: Letter of Introduction for Participants

School of Education
GPO Box 2100
Adelaide SA 5001
Email: penny.vandeur@flinders.edu.au
CRICOS Provider No. 00114A
Date 1st October 2015

LETTER OF INTRODUCTION FOR PARTICIPANTS

Dear

This letter is to introduce Kylie Booker who is a Doctorate student in the School of Education at Flinders University. She will produce her student card, which carries a photograph, as proof of identity.

She is undertaking research leading to the production of a thesis titled "A Tall Poppy in a Small Field", a single narrative case study exploring the intricacies and complexities of a profoundly gifted student in a school context.

She would like to invite you to assist with this project by agreeing for her to conduct a number of interviews will cover certain aspects of this topic. No more than 2 hours on 3-4 occasion(s) would be required.

Be assured that any information provided will be treated in the strictest confidence and none of the participants will be individually identifiable in the resulting thesis. Please note, whilst the names of the participants will not be published, anonymity and confidentiality cannot be guaranteed on the basis that the study includes a small sample and the key participant by association may be identified. You are, of course, entirely free to discontinue your participation at any time or to decline to answer particular questions.

Since she intends to make a tape recording of the interview, she will seek your consent, on the attached form, to record the interview, to use the recording or a transcription in preparing the thesis, on condition that your name or identity is not revealed, and to ensure the recording will not be made available to any other person.

Any enquiries you may have concerning this project should be directed to me at the address given above or by e-mail penny.vandeur@flinders.edu.au

Thank you for your attention and assistance.

Yours sincerely

Dr Penny Van Deur
School of Education

*This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (*7106 SBREC*). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au*

Appendix B: Participant Photograph Release

PARTICIPANT PHOTOGRAPH RELEASE FORM

Tall Poppy in a Small Field

I ….....

agree to the photographs I have taken for the *research study 'Tall Poppies in a Small Field'* (as requested in the Participant Information Sheet) to be used for:
[please circle whichever applies]

researcher's background analysis only / not for display	agree/don't agree
display in thesis materials	agree/don't agree
display in academic articles and presentations	agree/don't agree

1. I have read the information provided in the Participant Information Sheet.

2. Details of procedures and any risks have been explained to my satisfaction.

3. I am aware that I should retain a copy of the Information Sheet and Participant Photograph Release Form for future reference.

4. I understand that:

   - All photographs will be de-identified using computer editing software
   - Photographs will be numbered not labelled to maintain anonymity.

Participant's signature…… **Date……...**

I certify that I have explained how photographs will be used to the volunteer and consider that she understands what is involved and freely consents to participation.

Kylie Booker 01/12/2015
Researcher

*This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (*7106 SBREC*). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email* human.researchethics@flinders.edu.au

Appendix C: Letter of Introduction for participating school

School of Education
GPO Box 2100
Adelaide SA 5001
Email: penny.vandeur@flinders.edu.au
CRICOS Provider No. 00114A

Date: 1st October 2015

LETTER OF INTRODUCTION FOR PARTICIPATING SCHOOL

Dear

This letter is to introduce Kylie Booker who is a Doctorate student in the School of Education at Flinders University. She will produce her student card, which carries a photograph, as proof of identity.

She is undertaking research leading to the production of a thesis titled "A Tall Poppy in a Small Field", a single narrative case study exploring the intricacies and complexities of a profoundly gifted student in a school context.

She would like to invite you to assist with this project by agreeing for her to conduct a number of interviews will cover certain aspects of this topic with some of your current teachers on campus.

Be assured that any information provided will be treated in the strictest confidence and none of the teachers will be individually identifiable in the resulting thesis. You are, of course, entirely free to discontinue your participation at any time.

Any enquiries you may have concerning this project should be directed to me at the address given above or by e-mail penny.vandeur@flinders.edu.au

Thank you for your attention and assistance.

Yours sincerely

Dr Penny Van Deur
School of Education

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number 7106 SBREC. *For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au*

Appendix D: Researcher Timeline for Transcribing Interview Data

Participants	Interview Dates	Goal Transcribed Notes	Completed	Notes to self
Ruby	July 2016	August 2016	7 September 2016	Took me alot longer than first thought and it was a long interview
	August 2016	September 2016	27 September 2016	
	September 2016	October 2016	16 October 2016	
	October 2016	November 2016	12 December 2016	Too many transcripts to complete in November, took on too much and again it was a substantial interview
	January 2017	January 2017	26 February 2017	Finished this last transcript in readiness to finish first draft of Chapter 4, Narrative
	June 2018	June 2018	June 23 2018	Final interview to clarify some points and get some final comments from main participant, this interview completed on skype
Ruby's parents	July 2016	August 2016	14 August 2016	
	September 2016	October 2016	11 October 2016	
	November 2016	December 2016	23 December 2016	Took longer to complete as finishing of Ruby's transcript
Mrs C	October 2016	November 2016	15 November 2016	
Mrs. G & T	July 2016	August 2016	25 August 2016	
	August 2016	September 2016	30 September 2016	
Mr T	August 2016	September 2016	4 October 2016	Alittle delayed with this as I was behind with Ruby's transcript
	October 2016	November 2016	October 27 2016	This interview quite short so was able to meet deadline on this
Mrs R	October 2016	November 2016	November 28 2016	Took longer on this one as I needed to make email contact to clarify some points
Siblings	November 2016	December 2016	6 January 2017	Increased workload at school in December unable to complete to New year
Mr P.	August 2016	September 2016	1 November 2016	Very late getting to this transcript, working on multiple interviews and ended up working on both interviews together from Mr P. which worked ok
	September 2016	October 2016	1 November 2016	
Mrs H.	August 2016	September 2016	20 September 2016	
	October 2016	November 2016	23 November 2016	
Workload	August 2016	3 transcripts		
	September 2016	5 transcripts		
	October 2016	3 Transcripts		
	November 2016	5 transcripts		
	December 2016	2 transcripts		
	February 2017	1 transcript		
	June 2018	1 transcript		

Appendix E: Exert of Transcript between Kylie Booker and Mrs. C. demonstrating

Exert of Transcript between Kylie Booker and Mrs. C
October 10, 2016

Researcher: Tell me of your first memory of Ruby?

Mrs C: My first memory of Ruby is as a junior primary school student. I heard from others that she would at times scream. I was unsure about the reasons but could assume it may have been from frustration about things not going her way or maybe she was analysing what was fair or unfair. I remember witnessing one such incident in the Resource Centre and wondering the reasons for her upset. I want it to be noted I have mentioned this not as a negative but as an observation. (very directed comment, almost forceful, checked that I had noted her last comment)

Researcher: How did your previous experience in working with gifted children prepare you for working with Ruby?
Mrs C: (Big Pause, change of position) Mmm, let me think! I remember my eldest son starting school eager to learn, and coming home saying he did not want to go again because he had not learnt to read. My son is gifted, and some similarities came clearly to mind (teacher understanding giftedness/ efficacy) –ok, sense of justice, able to articulate and argue from their point of view and believe they are right even though physically they are still children, able to retain information quickly and put themselves in the shoes of any character if acting or singing.

Researcher: Tell me more about that. So you had experience not only as a teacher but as a parent?

Mrs C: Moved further forward in seat, positive body language. Yes, well yes, I felt like I had a better understanding of Ruby from my experience with my son. I felt like I understood her and I really wanted to ensure she did not experience what my son had with boredom at school. (teacher efficacy)

Researcher: What were your further experiences?

Mrs C: Oh, (pause), my next memory is as a coordinator when I worked with a small group of Year 2/3 students who had been nominated by the SHIP coordinator and their classroom teachers as being "gifted." (provision) Most of these had been through an assessment process. This was the first time I came into contact with Ruby educationally. She was articulate and easy to motivate. Whatever activity I came up with she was eager to explore ideas and produce excellent work .

Researcher: Can you recall what type of activities were these?

Mrs C: Yes, well they were thinking and problem solving activities, which engaged curiosity (provision). I can't recall exactly what they were (Long Pause) but yes, yes they were related to problem solving.

Researcher: Thank you, that's wonderful! How did Ruby approach these activities?

Mrs C: (Heightened voice, eager to answer) She was eager and engaged, they were fairly open ended tasks (provisions), so I think she quite liked it and oh I think she liked the challenge and demonstrating her knowledge and ability to solve the problems so quickly. Keep in mind this was also a group of students that were identified as gifted so I think she felt more at home and at ease with this group (social & emotional), although to be honest I had not seen alot of her in the class only what I had heard.

Researcher: Did this program have a finishing point or did it continue throughout the year?

Mrs C: No, no it went for a Semester, I had some release time so the school implemented the program (provision). I wish it had gone longer, it was very rewarding working with these children(teacher efficacy)

Researcher: Did you receive any feedback from students, parents or peer teachers?

Mrs C: Actually yes! Yes I did. At the conclusion of this programme Ruby's mother came to thank me. She informed me that she was wary of Ruby being called gifted because of other members of her husband's or her family being gifted with what she perceived as poor social skills.(parents believes & understandings) This I believe was a turning point in Ruby's education as that acknowledgement led to acceptance.

Researcher: Did you teach Ruby after this?

Mrs C: My next memory was when she was in Year 4. Ruby was in a class that focused on social skills, working in teams and developing the child as a whole person. The teacher that year came to me re mathematics as she felt that she was not providing appropriate tasks for Ruby's obvious skills, knowledge and understanding in this area.(teacher efficacy) We decided that Ruby would join my 6/7 class and be part of the mathematical learning occurring there.(Acceleration, provision) We put in place that this would be a trial. She would come as much as possible. If something was happening in her Year 4 class that she was interested in there would be no pressure for her to attend. (Autonomy, flexible pathways).

Researcher: How did she go with this?

Mrs C: She came into this older class, a tiny Year 4 girl, but she did not feel intimidated by these
students.(social & emotional) She responded to mathematical questions quickly and with confidence. The older students looked in amazement as she orally answered

questions with accuracy and clarity. As I was not sure what entry point to pitch the learning at I gave her an algebra activity from a Year 7 textbook. I remember saying to her to read the introduction to these examples and the suggested setting out of these examples. These examples included order of operations and directed number. She completed these algebra examples independently. When reviewing these examples with her there were only two or three examples that I needed to explain to her. (provision)

Researcher: Did she mix with the Year 6/7's in this mathematics class? Group tasks etc

Mrs C: No not really but she seemed so focused on the maths that I do not think it worried her! (Social and Emotional) We did do some group work but she resisted at every point, I knew this was something we would need to work on!

Researcher: Were you able to get any feedback from Ruby on these mathematics classes? Did she enjoy them?

Mrs C: Oh yes I think so, I did not get any formal reflections from Ruby but Ruby did not hold back in providing feedback if there was something she felt strongly about, the work was certainly more suitable to her abilities and as I said before she did not seem intimidated by the bigger kids.

Researcher: What happened when Ruby entered Year 5?

Mrs C: In Year 5 she was fortunate to have another great teacher. The teacher provided
learning that challenged thinking and focused on analysis of texts and mathematical Problems (provision, teacher efficacy) . Ruby acknowledged this teacher at her Year 7 graduation when receiving an academic award. I know that was a very good year for her. Oh I remember she also had a mentor that came in once a week to work on Australian Mathematics competition past papers. (provision) There was just not enough scope and time in the curriculum to work through all of this with her, she looked forward to those sessions very much (wellbeing, social and emotional)!