An Intervention Strategy to Facilitate the Achievement of Potential in Two Underachieving Gifted Students: Two Case Studies

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Statement of Original Authorship

The work contained in this thesis has not been submitted previously for a degree or diploma at any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

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ABSTRACT

Not all gifted students achieve according to their exceptional potential. Up to half of the gifted population underachieve. Though significant research has been conducted into identification and characteristics of underachieving gifted students, there is a need for current research to use the established theoretical understandings and investigate practical strategies for the reversal and remediation of underachievement in gifted students. The researcher proposes the Creative Writing Program as an intervention strategy for underachieving gifted students. The purpose of this study is to investigate the impact of the researcher's Creative Writing Program and, in so doing, identify the successful teaching strategies that facilitate the achievement of potential in two underachieving gifted students.

To answer these research objectives, two separate case studies were conducted with two participants identified as being gifted, yet underachieving. The data were gathered from multiple sources and perspectives including: interviews with student-participants, teachers and parents; the researcher's observations and field notes; and a qualitatively evaluated pre- and post-test. The data were analysed using open-coding methods and it was found that the Creative Writing Program impacted the student-participants' negative feelings, underachieving behaviours and social awareness. It was also found that the following strategies were successful for facilitating the achievement of potential in underachieving gifted students: one-to-one teaching, positive teacher identification and differentiation.

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CHAPTER 1: INTRODUCTION

> "Gifted children are national and global resources who have the potential to enrich us in multifaceted ways. It is in our own self-interest to therefore foster their talents so that they might enhance the cultural, material and economic well-being of civilisation." (Rafidi, 2008, p. 64)

It almost seems paradoxical that gifted students could possibly underachieve. However, the phenomenon of the underachieving gifted student exists in many schools. The inquiry of the Australian Senate Select Committee for the Education of Gifted and Talented Children suggests between 38-75% of gifted students underachieve, and between 15-40% drop out of school before completing Year 12 studies (2001, p. 14). There is ample research (Davis & Rimm, 1998; Hoover Schultz, 2005; Weiss, 1972) to support the contention that approximately half of the gifted population do not achieve according to their potential: they underachieve.

Though some studies have been conducted into investigating effective intervention programs to remediate underachievement in gifted students, these studies have had limited success (Hoover Schultz, 2005; Reis & McCoach, 2000). The aforementioned Australian statistics indicate the urgent need for research studies to trial potential intervention programs, comprised of practical teaching strategies, and find successful ways for combating underachievement in gifted students.

The study documented in this thesis trialled one such intervention strategy: a part-time withdrawal program, in which students were guided through a specifically designed series of creative writing

tasks. The study focused on the area of creative writing, as this was an area in which the participants were deemed to be underachieving.

Aims of the Study

The aims of this research emerged from the literature review conducted for this study. This literature review (see Chapter 2 – Literature Review) identified a number of areas where further study is required, particularly in the area of successful intervention programs.

The first aim of this study is to investigate whether a part-time withdrawal intervention program can meet the learning needs of an underachieving gifted student and thus begin to reverse his or her underachievement. The purpose of the part-time withdrawal program, the Creative Writing Program, is twofold: to improve students' writing quality through the content and skills taught in this program; and to explicitly address some of the student's ideas and perceptions concerning themselves and their abilities.

The second aim of this study is to identify successful teaching strategies that facilitate the achievement of potential in an underachieving gifted student through the implementation of the Creative Writing Program.

Research Questions

The following research questions were designed to enable the aims of this study to be achieved:

- What is the impact of a Creative Writing Program on an underachieving gifted student?
- What teaching strategies are successful in facilitating the achievement of potential in an underachieving gifted student?

The above research questions will be applied to two individual Year 7 gifted students, who have been identified as underachieving. It is not the intention of this study to compare these two participants, but rather to present two individual case studies. For this reason, the findings from the two case studies will be presented in two separate chapters, Chapter 4 and 5.

Background

There is a history of research, dating back to the 1920s, on "giftedness": attempting to pin down the phenomenon to a definition. For the purpose of this study, Gagné's (1993) Differentiated Model of Giftedness and Talent has been used as the working definition of "giftedness". According to Gagné (1993) giftedness has two components: "distinctly above average" natural aptitude and "distinctly above average" performance (p. 72). Gagné's model differentiates between the terms "gifted" and "talented" by describing the former as natural potential, and the latter as the fulfilment of this potential in demonstrated ability.

Gagné's definition of "giftedness" provides insight into the enigma of the underachieving gifted student. Underachievement, in these terms, is where a student may have significant natural potential to achieve but has not yet translated this potential into actual demonstrated performance. Thus, underachievement is a notable discrepancy between natural potential and demonstrated performance.

Most research into this area was conducted in the 1980s, with a recent resurgence of interest in the early 2000s. Betts and Neihart (1988) identified that gifted underachievers are individuals with distinctive behaviours, feelings and learning needs (p. 252), and thus any intervention strategy must first consider the unique underachievement of the individual. Other authors have identified that, typically, underachieving gifted students seem to demonstrate a low self-concept or self-image (Fine & Pitts, 1980; Reis & McCoach, 2000; Whitmore, 1980).

While much of the literature on gifted underachievement documents definitions and profiles, very few studies have reported on effective practical strategies and programs for the remediation or reversal of underachievement (Gallagher, 1991, p. 16; McCoach & Siegle, 2003, p. 415; Reis & McCoach, 2000, p. 165). Reis and McCoach's (2000) seminal work *The underachievement of gifted students: What do we know and where do we go?*, has provided a summary and evaluation of the research into the area of underachievement and has made suggestions for further research into intervention programs, and teaching strategies that are likely to reverse underachievement.

There are two types of intervention strategies used to reverse underachievement: counselling-intervention and instructional-intervention. Typically, counselling-interventions concentrate on addressing the catalysts that prevent achievement of potential; including environmental catalysts

such as family conflicts, or intrapersonal catalysts such as motivation. According to Reis and McCoach (2000) these studies have not been particularly successful (p. 164), though Rimm (1995) would claim her Trifocal Model has been successful in remediating underachievement.

Instructional-intervention includes part-time withdrawal programs and ability grouping. Such interventions are characterised by a smaller student-teacher ratio, less conventional teaching strategies, student choice and student-centred classrooms (Reis & McCoach, 2000, p. 165). Though these interventions have not been documented as successful strategies for underachievement in gifted students, Hoover Schultz (2005) argues that it is due to the limited time, space and resources of a school to implement the program effectively, rather than the program itself (p. 48).

According to the literature review conducted for this study, there is no intervention strategy that has met with significant documented success. Considering that underachieving gifted students comprise such a significant proportion of the gifted population (Davis & Rimm, 1998; Hoover Schultz, 2005; Senate Select Committee, 2001, p. 14; Weiss, 1972), there is an urgent need for research to be conducted to find effective practical strategies and intervention programs that can facilitate the achievement of potential in underachieving gifted students in school-based contexts.

Rationale

A significant proportion of the gifted population underachieve (Davis & Rimm, 1998; Hoover Schultz, 2005; Senate Select Committee, 2001, p. 14; Weiss, 1972). Based on the literature review

for this study, it appears that there is scarcely enough research into successful use of practical teaching strategies and intervention programs that remediate and reverse underachievement in gifted students in school contexts. Furthermore, there is the need for research to be updated to address the needs of the current generation of underachieving gifted students. Even Reis and McCoach's (2000) valuable seminal work *The underachievement of gifted students: What do we know and where do we go?* is over a decade old.

The purpose and rationale behind the research study, documented in this thesis, is to trial a part-time withdrawal intervention program, the researcher's Creative Writing Program. This intervention program builds on the theoretical research into underachieving gifted students and is comprised of practical teaching strategies, informed by previous research, to reverse underachievement and facilitate the achievement of potential in underachieving gifted students. These practical teaching strategies are discussed further in Chapter 2 – Literature Review.

Creative writing was chosen as the content focus of this program as it was an area in which both participants were deemed to be underachieving. Furthermore, the ability to compose imaginative texts is assessed every year in the high school English classroom, under the NSW Board of Studies English Stage 4, 5 and 6 syllabi (covering Year 7-12). If students can reverse their underachievement in creative writing tasks, they are closer to achieving their potential in the English classroom.

Overview of the Study

This research study is based on a qualitative design incorporating case study approach, in which two male students, in Year 7, participated in the researcher's Creative Writing Program for a period of seven weeks. This program used practical teaching strategies to facilitate learning, as students were guided through a series of narrative-based creative writing tasks. Both student-participants were identified as "gifted" students. However, there was an observable discrepancy, in both students, between their "gifted" potential and their demonstrated performance, particularly in the area of creative writing. Thus, the participants were determined to be underachieving gifted students. Using case study methods, the researcher gathered data from multiple sources (interviews, pre- and post-evaluations, observations and field notes, and work samples) to determine the impact of the Creative Writing Program in facilitating the achievement of potential in underachieving gifted students.

The structure of this thesis is organised as follows. The Introduction (Chapter 1) provides a concise introduction, detailing the research questions and aims of the study. The Literature Review (Chapter 2) is a compilation and analysis of past and current relevant literature on the topics of giftedness, underachievement and intervention strategies. The Methodology chapter (Chapter 3) outlines the natural setting, participants, evaluation criteria, data collection methods and data analysis methods of this study. The Findings chapters (Chapter 4 and 5) are descriptions of the findings derived from data analyses of two case studies. The Discussion and Recommendations chapter (Chapter 6) is an evaluation of the results of this study, identifies where this study fits into the broader network of literature on this topic, and includes recommendations for practical teaching

strategies. Finally, the Conclusion chapter (Chapter 7) summarises the researcher's concluding remarks about this study and includes suggestions for further research.

CHAPTER 2: LITERATURE REVIEW

Gifted students present some of the greatest challenges, and possibly the most memorable experiences, for teachers. However, a significant proportion of gifted students are often overlooked: underachieving gifted students. The study, documented in this thesis, is primarily concerned with investigating strategies that can remediate underachievement in gifted students. Thus, the researcher has set out to answer the following research questions through in-depth case studies:

- What is the impact of a Creative Writing Program on an underachieving gifted student?
- What teaching strategies are successful in facilitating the achievement of potential in an underachieving gifted student?

This chapter, the Literature Review, is a synthesis and evaluation of the relevant research on the topics of: defining giftedness; the underachievement of gifted students in school-based contexts; strategies for reversing or remediating underachievement; and the methodology previous studies have applied when conducting research in this area. This chapter will also provide a firm theoretical background for the researcher's Creative Writing Program, and will highlight the literature that has informed the aforementioned research questions of this study.

Defining Giftedness

When used in association with school students, the term 'gifted' can be quite contentious, laden with a variety of meanings. Since the Terman studies (1925), where the first Stanford-Binet Intelligence Scale was applied as a selection criterion for 'giftedness', numerous journal articles

and books have been published claiming to have pinned down the phenomenon to a simple definition. Some of these definitions revolve around demonstrated high *performance* in one or more particular domains. Davis, Rimm and Siegle (2011) identify that giftedness has been defined in terms of performance, such as: performing in the top three percent of intellectual ability; performing two standard deviations above the mean; or performing an IQ score higher than 130 (p. 54).

Another commonly referred to definition of giftedness in the literature is Gardner's theory of Multiple Intelligences (Ramos-Ford & Gardner, 1991). Gardner asserts that there are at least seven intelligences; this can be interpreted to mean that *each* individual has strength in at least one of these fields (pp. 55, 63). The assumption derived from Gardner's model is that everyone is 'gifted', which does seem to appeal to those who live in an egalitarian culture. Despite this, while every person may have gifts, the research indicates that not everyone is "gifted" (Colangelo & Davis, 1991, p. 4; Gagné, 1993; Senate Select Committee, 2001, pp. 6, 21-22).

There is extensive literature on the topic of 'giftedness'. It is beyond the scope of this chapter to outline it all. However, it is important to note that a significant amount of the literature on this topic suggests that the defining factor of 'giftedness' is high *potential* in one or more particular domain (Davis, et al., 2011, p. 287; Gagné, 1993, 2007; Lassig, 2009; Montgomery, 2009b, p. 3; Senate Select Committee, 2001). The equating of 'giftedness' with potential is a particularly useful definition in the context of this study, as it also encompasses the possibility of gifted students underachieving (discussed in more detail under the heading 'The Underachieving Gifted Student' later in this chapter).

Gagné's (1993) 'Differentiated Model of Giftedness and Talent' hinges upon the premise that 'giftedness' is potential. For this reason, Gagné's definition has been adopted as the working definition of 'giftedness' for this study. Gagné's definition of giftedness was cited in the inquiry of the Australian Senate Select Committee for the Education of Gifted and Talented Children (2001, pp. 7, 20), as it "recognises the gifted student who may be underachieving... or prevented from realising his or her potential" (p. 20). Furthermore, Gagné's (1993) definition is also the definition used by the New South Wales Department of Education and Training (2006) in policy documents regarding the identification and education of gifted and talented students. According to Lassig (2009), Gagné's definition of 'giftedness' is widely accepted. For these reasons, Gagné's (1993) definition is suitable in the context of this study.

Gagné's (1993) 'Differentiated Model of Giftedness and Talent' differentiates between the terms 'gifted' and 'talented'. He describes giftedness as "distinctly above average... human aptitude", and talent as "performance that is distinctly above average" (Gagné, 1993, p. 72). Therefore, giftedness is defined as potential; and talent as the fulfilment of potential in demonstrated performance. Figure 2.1 is a recent revision of the 'Differentiated Model of Giftedness and Talent' (2007) that visually depicts giftedness and talent on a continuum. Development along this continuum is affected by certain catalysts: environmental factors, intrapersonal factors and chance (Gagné, 2007, p. 95). These three catalysts impact on the progression a student makes from being purely 'gifted' (possessing exceptional potential) towards development of 'talent' (exceptional demonstrated performance).

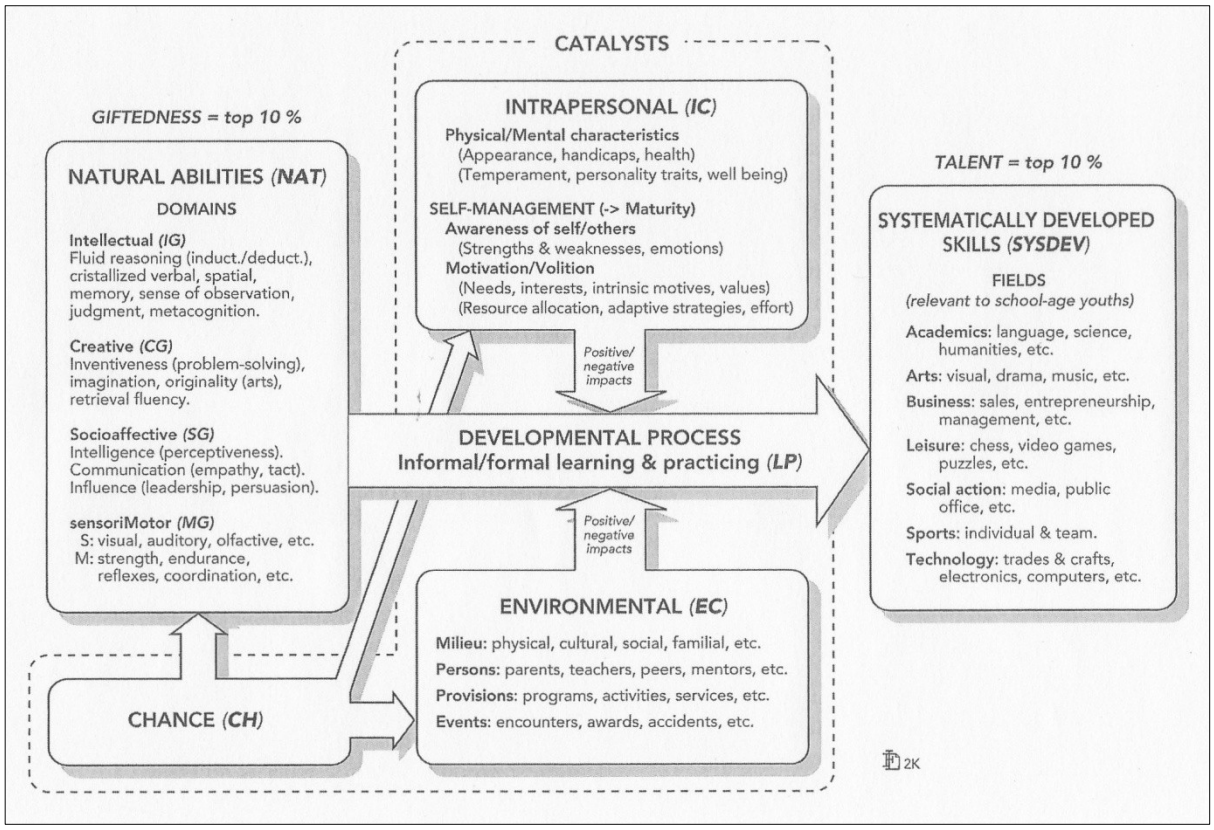


Figure 2.1 Gagné's 'Differentiated Model of Giftedness and Talent (2003 Revision)' as cited in Gagné (2007, p. 95).

It is of particular significance to this study that this theory has identified that potential does not always equate to demonstrated performance. 'Giftedness', according to Gagné's model, is potential; while 'talent' is the result of the informal and formal learning processes that translate that potential into demonstrated ability (as illustrated in Figure 2.1). In the terms of Gagné 's theory, the researcher's Creative Writing Program is an environmental catalyst and the first research question aims to investigate what the impact of this Program is on the transformation of potential into demonstrated performance.

Uniquely, Gagné's model provides insight into the one of the main subgroups of giftedness: underachievement in gifted students. Gagné's model, and innumerable other experts in the field of 'giftedness' (Davis, et al., 2011, p. 288; Gallagher, 1991; Hoover Schultz, 2005; Montgomery,

2009b; Rafidi, 2008; Reis & McCoach, 2000; Rimm, 1991; Whitmore, 1980) recognise that gifted students do not always achieve according to their significant potential. The inquiry of the Australian Senate Select Committee (2001) concluded that "Gifted children are not always successful" (p. 18).

Before concluding this section, it is important to briefly mention the ways in which the literature has informed the researcher's procedures for identifying giftedness and high potential. A significant amount of studies indicate that giftedness cannot be measured by a single IQ score or standardised test result alone (Reis & McCoach, 2000; Sternberg, 1991, p. 51). For this reason, the researcher's approach to identifying giftedness has been guided by Reis and McCoach's (2000), and Davis et al.'s (2011) suggestions for using multiple criteria to identify giftedness. Standardised test results will be considered, alongside teacher recommendation and classroom grades, in the context of Gagné's (1993) definition of giftedness: giftedness is "distinctly above average" potential.

The Underachieving Gifted Student

Defining Underachievement

Generally giftedness is equated with high levels of achievement (Gallagher, 1991, p. 16), but what of the gifted student who does not achieve; or rather, who 'underachieves'? The inquiry of the Australian Senate Select Committee found that between 38-75% of gifted students underachieve, and between 15-40% drop out of school before completing Year 12 studies (2001, p. 14). The

inquiry concluded that “Underachievement is common” (Senate Select Committee, 2001, p. 13). This contention is further corroborated by a number of researchers (Davis & Rimm, 1998; Hoover Schultz, 2005; Weiss, 1972): a significant proportion of students identified as gifted do not achieve according to their potential. They underachieve.

Extensive literature exists on pinning down a definition for underachievement in gifted students. For example, there was a significant amount of research into identifying underachievers in the 1950s and 1960s. However, a resurgence of interest occurred in the 1980s and 1990s after the publishing of Whitmore’s (1980) book that challenged the lack of attention gifted students had received in education research, and detailed some of the first researched strategies into remediating underachievement. Following shortly after Whitmore’s book an American report by Richert, Alvino and McDonnel (1982) pointed out the lack of identification procedures in place for effectively identifying underachieving gifted students. Consequently, there was a revival of interest in the area of defining underachievement in gifted students and shaped consequent definitions.

Though currently no universal definition exists for underachievement in association with giftedness, the common thread in most of the literature appears to be a “discrepancy between a measure of potential and actual productivity” (Davis, et al., 2011, p. 288). Underachievement in gifted students is fundamentally delineated by an incongruity between a student’s potential to achieve and their actual performance (Baum, Renzulli, & Hebert, 1995; Butler-Por, 1987; Davis & Rimm, 1998; Dowdall & Colangelo, 1982; Gallagher, 1991; Reis & McCoach, 2000; Rimm, 1995; Senate Select Committee, 2001; Whitmore, 1980). According to Gagné’s model (1993, 2007) an underachieving gifted student can be understood as an individual who possesses high potential (or aptitude), but has been unable to convert that potential into demonstrated performance as evidenced

in class marks or teacher confirmation. This understanding of underachievement in gifted students has shaped the researcher's criteria for student-participation in this study (described in detail in Chapter 3 – Methodology).

A discrepancy between potential and demonstrated performance is the fundamental definition of underachievement. However, Reis and McCoach (2000) assert that there is a need to quantify the term 'underachievement', as surely a once-off bad performance does not indicate that the gifted student has become an underachiever. They state that the discrepancy between potential and demonstrated performance must be "significant" (Reis & McCoach, 2000, p. 157) for the gifted student to be accurately labelled as an underachiever. For example, a slightly lower-than-normal result in a class test is not indicative of underachievement. However, a student failing a class test in which they have the potential to excel may be a preliminary indicator of underachievement in gifted students.

The second quantifying factor for a student to be identified as being an underachieving gifted student is underachievement over an extended period of time. Reis and McCoach (2000), and Fine and Pitts (1980) claim that underachievement must be consistent over an extended period of time of at least one year. A gifted student achieving significantly lower-than-normal results on one week's worth of school work could be attributed to sickness. However, a gifted student achieving significantly lower-than-normal results for over one year indicates a pattern of underachievement.

Furthermore, in order to comprehensively describe underachievement, the instruments used to measure the discrepancy between potential and actual achievement should be considered in a comprehensive definition of underachievement. Davis, Rimm and Siegle (2011) indicate that tests

of ability could be compared with tests of achievement (p. 288). The Senate Select Committee (2001) determined that the best approach to identify underachievement would be a combination of objective test and subjective measures. This is the approach of identification that has been adopted in this study. Subjectively, a teacher or parent identifies underachievement, and this is verified through more objective discrepancies between class tests and grades, standardised tests and school reports (Reis & McCoach, 2000, p. 154; Senate Select Committee, 2001, p. 37).

Reis and McCoach's (2000) seminal study, *The underachievement of gifted students: What do we know and where do we go?'*, has succinctly summarised the findings of numerous researchers in defining underachievement and consequently propose the following definition. This definition is considered the working definition of 'underachievement' for this study:

> "Underachievers are students who exhibit a severe discrepancy between expected achievement (as measured by standardized achievement test scores or cognitive or intellectual ability assessments) and actual achievement (as measured by class grades and teacher evaluations). To be classified as an underachiever, the discrepancy between expected and actual achievement must not be the result of a diagnosed learning disability and must persist over an extended period of time." (p. 157)

There has not been a great amount of research into this area since the 1990s and early 2000s which reveals a significant gap in the literature. Of course, there are some exceptions, such as Reis and McCoach (2000), Schultz (2002), Byrne (2002) and Al Hmouz (2008). However, more research is required to further investigate the complex phenomena of underachievement in gifted students in order to provide contemporary results and findings.

Characteristics of Underachieving Gifted Students

To further assist in the identification of underachieving gifted students, considerable research has been conducted into creating a profile of underachievement. The foremost characteristic of common consensus (Dowdall & Colangelo, 1982; Fine & Pitts, 1980; Gallagher, 1991; McCoach & Siegle, 2003; Montgomery, 2009b; Reis & McCoach, 2000; Whitmore, 1980) is low self-esteem or self-concept in the underachieving gifted student. However this remains an area of controversy in the literature as the findings from Holland's (1998) school-based study, specifically focussing on underachievement in boys, indicated that there was no significant difference in self-esteem between underachievers and their achieving peers. Furthermore, Gagné (1993) also asserts that aptitude (or potential), which gifted underachievers possess, breeds self-confidence (p. 73). From these research findings, it is fair to conclude that underachieving gifted students are likely to experience a lower self-concept, however it is unwise to generalise that this is true of *all* underachieving gifted students.

The reason Gagné's model (1993) is used in this study, is because it describes the phenomenon of underachievement so succinctly. Gagné (1993) would suggest that the reason gifted students do not achieve according to their potential (underachieve) is due to a number of catalysts that affect their development along the potential-performance continuum. According to his most recent version of the 'Differentiated Model of Giftedness and Talent' the following catalysts either prevent or aid the translation of potential into demonstrated performance: environmental factors including people, physical environment, life events, provisions for giftedness; and, intrapersonal factors including personal characteristics, temperament and motivation (Gagné, 2007). The Senate Select Committee

(2001), after consideration of Gagné's theory, concluded "Potential, plus 'environment', leads to achievement" (p. 7). Therefore, it is possible that an unsupportive home or school environment is a characteristic of underachieving gifted students.

This is consistent with other research findings that suggest underachieving gifted students tend to have struggling family relationships or familial conflict in common (Davis & Rimm, 1998; Davis, et al., 2011; Fine & Pitts, 1980; Hoover Schultz, 2005; Reis & McCoach, 2000; Senate Select Committee, 2001). To add to the research on the profile of underachievement, Peterson's (2001) mixed method approach investigated adults who self-identified as high ability adolescents who underachieved in school. A significant number of participants identified that they had a troubled home life as a result of family breakdown or significant sibling rivalry and related this to their underachievement (Peterson, 2001, pp. 241, 244). However, it must be noted that although a significant number of underachieving gifted students had familial issues in common, it was not identified as a completely universal characteristic of underachieving gifted students. Other researchers also suggest that negative peer relations are a characteristic of the underachiever (Betts & Neihart, 1988; Davis & Rimm, 1998; Davis, et al., 2011; Hoover Schultz, 2005; Montgomery, 2009b; Reis & McCoach, 2000; Senate Select Committee, 2001).

It is unsurprising that a number of studies identify boredom and understimulation in the classroom as a key characteristic of underachieving gifted students (Davis & Rimm, 1998; Reis, Hebert, Diaz, Maxfield, & Ratley, 1995; Rimm, 1995). There is cause for concern that the unique learning needs of the underachieving gifted individual are not met by typical mainstream classes and thus may perpetuate the problem.

An important study into the characteristics of gifted students was conducted by Betts and Neihart in 1988. Of the six gifted profiles they identified, five were not achieving their potential (or, were underachieving gifted students): Type VI, the 'Autonomous Learner' was the only gifted student profile that was achieving their potential. This study noted that gifted students are diversely motivated, exhibit different characteristics and thus, require individual approaches according to their learning needs (Betts & Neihart, 1988, p. 252). Betts and Neihart's (1988) first five profiles describe gifted students who:

- appear successful because they have learned the system but need challenge to reach their potential (Type I 'Successful') (p. 249);
- are not always recognised as gifted students, as they can be challenging or "divergently gifted", such as with creativity (Type II 'Challenging') (p. 249);
- "hide their giftedness" to gain peer acceptance (Type III 'Underground') (p. 249);
- find their interests are not recognised by the curriculum (Type IV 'Dropouts') (p. 252); or
- have a learning disability or physical or emotional handicap (Type V 'Double-Labelled) (p. 252).

With such diverse motivations and manifestations of underachievement, it becomes obvious that it is very difficult to make universal statements about underachieving gifted students. It is unnecessary to provide further detail the six profiles here; however, it is worth noting that the 'Profiles of the Gifted and Talented', as proposed by Betts and Neihart (1988), has been used by the researcher as a tool to gain insight into the manifest underachievement in the two students selected for participation in the two case studies in this study.

Betts and Neihart (1988) identify that highly creative students can potentially be gifted. Davis et al. (2011) note, like Betts and Neihart, that highly creative students are "less visible" and tend to be looked over for school-based Gifted and Talented programs. It is worth emphasising that creativity is a domain of giftedness that Gagné also identifies (2007, p. 94).

Similar profiles have been created by other researchers, such as Rimm's (1995) 12 categories of underachievement. Rimm's research has informed three Achievement Identification Measure tests (AIM, GAIM and AIM-TO) that are valid and reliable instruments with the purpose of gathering data from parents, students and teachers to identify underachievement (Davis & Rimm, 1998, p. 281). More available, and thus perhaps more useful to this qualitative study than Rimm's tests, is Whitmore's (1980) checklist to assist in the identification of underachieving gifted students. Whitmore's (1980) research and appendices (though specifically targeted for primary school-aged underachieving gifted students) have been useful in guiding the researcher's interview questions for the students, parents and teachers involved in this study.

As both Betts and Neihart (1988), and Whitmore (1980) conducted their research over 30 years ago, it is pertinent to substantiate and extend their contributions with more contemporary research into the characteristics of underachieving gifted students. For this reason Montgomery's (2009b) recent checklist for identifying underachieving gifted students will be considered alongside the aforementioned researchers. As well as the previously discussed characteristics, Montgomery (2009b) proposes the following characteristics of underachieving gifted students: "failure to complete schoolwork and homework; poor execution of work; avoidance of trying new activities; perfectionism; poor attitudes to school" (p. 6).

Al Hmouz (2008) found that personality factors, including motivation, self-regulation, goals and attitudes, were different between achieving gifted students and underachieving gifted students. This is consistent with Gagné's (1993) theory which suggests that personality factors can be a catalyst for the translation of potential into demonstrated performance.

It is important to emphasise that there is no profile for the *typical* underachieving gifted student, as there is no such thing as a *typical* underachieving gifted student. It appears to be common consensus amongst researchers that underachieving gifted students are a diverse group, and thus have diverse characteristics. Understandably, this is part of the difficulty in distinguishing underachievement. Nonetheless, underachievement often manifests itself in ways that are specific to the individual as underachievement depends on many varying external and internal factors (as identified in Gagné's model). There are some characteristics that appear to be repeatedly mentioned in the literature, and these provide a starting point for further research into ways to address underachievement. Davis, Rimm and Siegle (2011, p. 321) make clear that any intervention strategy that aims to reverse or remedy underachievement in gifted students should primarily reflect an understanding of the diversity within the demographic of the underachieving gifted student.

Strategies for Intervention

Betts and Neihart (1988) identified that gifted underachievers are individuals with distinctive behaviours, feelings and learning needs (p. 252), and thus any intervention strategy must first consider the unique underachievement of the individual. While much of the literature on gifted underachievement documents definitions and characteristics, very few studies have reported on

effective practical strategies and programs for the remediation or reversal of underachievement (Gallagher, 1991, p. 16; McCoach & Siegle, 2003, p. 415; Reis & McCoach, 2000, p. 165). This appears to be a significant gap in the literature on underachieving gifted students. Thus, it is imperative that research is conducted to investigate the impact of practical teaching strategies for underachieving gifted students.

According to the literature, the two main approaches that exist for reversing underachievement: counselling-intervention and instructional-intervention. Typically, counselling-interventions concentrate on addressing the catalysts that prevent achievement of potential; including environmental catalysts such as family conflicts, or intrapersonal catalysts such as motivation (Reis & McCoach, 2000, p. 164). Rimm's (1995) 'Trifocal Model' is an example of a counselling-intervention strategy. Fine and Pitts (1980) also propose a step-by-step structure for counselling-intervention that involves a series of meetings with teachers, parents and students, but this intervention strategy does not suggest any practical teaching strategies for the teacher to employ to engage the underachieving gifted student. It seems the role of the teacher is to ensure the student follows the plan for progress that is developed in the series of meetings between teacher, parent, student and counsellor.

Rimm (1995) claims that her counselling program has been successful in reversing underachievement in four out of five children (p. 161). The disadvantage of this strategy is the need for counsellor or psychologist intervention, leaving the classroom teacher unadvised as to how to assist the underachieving gifted student in their class. Though Rimm (1995) and Fine and Pitts (1980) report their strategies to be successful, Reis and McCoach (2000) claim that these approaches "had documented limited success in reversing students' underachievement patterns" (p.

164). Furthermore, in the context of this study, the counselling-intervention is not particularly useful for investigating practical ways educators can successfully remediate underachievement in gifted students. However, both Fine and Pitts (1980) and Rimm (1995) claim that paramount to the success of any intervention is a holistic approach, involving family, school and student. This should be considered in any attempt to remedy or reverse underachievement in gifted students. Implications for future research include selecting methodologies that include gathering data from family members.

The second approach for reversing underachievement in gifted students, as identified by previous research, is the instructional-intervention (also described as withdrawal programs or ability grouping). Such interventions are characterised by smaller student-teacher ratio, less conventional teaching and learning strategies, student choice and student-centred classrooms where the student is withdrawn from mainstream classes on a part-time or full-time basis (Reis & McCoach, 2000, p. 165). According to Hoover Schultz (2005) instructional-intervention has only shown limited success, however, she attributes this to limited time, space and resources available in a school to implement the intervention properly, not the intervention method itself (p. 48). Similarly, the Senate Select Committee (2001, p. 64) and Kulik and Kulik (2003; 1991, p. 188) found that ability grouping can be beneficial for high ability students. It seems logical that teachers can better meet the learning needs of underachieving gifted students (through effective pacing, content and differentiation) when students of like ability are grouped together. The Senate Select Committee (2001) determined that organising classes according to ability would not have major cost implications for schools, and thus would perhaps be the most effective strategy (p. 77).

In order for part-time withdrawal programs or ability groupings to be effective, the lesson content should not necessarily be greater in quantity, but greater in difficulty (Rafidi, 2008, p. 65; Senate Select Committee, 2001, p. 51). Rafidi's (2008) action-research on his mixed ability class, found that upending Bloom's Taxonomy (Bloom, Englehart, Furst, & Krathwohl, 1956) was highly effective in providing challenge for the gifted students who underachieve as they delved into activities that were more evaluative and synthesising in nature (p. 65).

According to Reis and McCoach (2000), and Whitmore (1980), positive teacher identification (or a positive teacher-student relationship) can be an effective strategy to remediate underachievement. Research indicates that the role of the classroom teacher must change, from "instructor" to "facilitator", if underachievement in gifted students is going to be impacted (Montgomery, 2009a; Reis & McCoach, 2000; Rowley, 2008, p. 36). Gagné's model (2007) supports these contentions that suggest the role of the teacher is significant. Gagné (1993, 2007) claims that teachers are one of the environmental catalysts that can either help or hinder students' development of potential into demonstrated performance.

In addition, a significant number of previous research (Black & Tromley, 1997, pp. 16-17; Fine & Pitts, 1980, p. 53; Reis & McCoach, 2000, p. 165; Rowley, 2008, p. 36; Whitmore, 1980, p. 398) suggest that a modification of the student's education environment may meet with success in reversing underachievement in gifted students, especially if the classroom is more student-centred with an appropriate differentiation for learning needs and styles.

Furthermore, interest-based content, or the choice of what to learn and how to learn it, is another common theme that runs through the research of potentially successful interventions for

underachieving gifted students (Reis & McCoach, 2000; Rowley, 2008; Whitmore, 1980). Emerick (1992) investigated ten gifted students who had been underachieving and the factors to which they attribute their success. She found that intervention based on interest and students' areas of strength could be quite effective in remediating underachievement in gifted students. In addition Reis and McCoach (2000) theorise that interventions that promote self-efficacy or self-regulation, may add to the effectiveness of other interventions (p. 166). As underachieving gifted students may lack motivation and self-regulation skills (Al Hmouz, 2008), programs that explicitly deal with these characteristics may be successful to remediate underachievement.

It should be noted that a lot of these instructional-intervention strategies are theorised and not yet researched and empirically proven. Though there are suggestions, the literature is lacking the findings from investigations and trials of these practical strategies in the context of reversing underachievement in gifted students. Furthermore, there was a significant amount of research into underachievement in the 1980s and 1990s, of which Whitmore's (1980) study on gifted elementary students was among those of significance as she provided some practical strategies for dealing with underachievement. However, this study is over 30 years old now.

It is significant that the literature of underachieving gifted students shows a trend away from purely qualitative studies. Not all research into this field needs to be large-scale quantitative research, as Foster (1986) argues "the very nature of this exceptionality means that we are attempting to describe and explain the usual, the atypical, the unique" (p. 33). Underachieving gifted students are a diverse group, as the literature has illustrated time and again. Research strategies should also reflect this diversity, in the pursuit of more personalised and individualised qualitative research approaches. These qualitative studies should investigate the individual ways in which

underachievement manifests and identify successful practical strategies for remediating underachievement.

Some case studies have been used, such as Reis, Hebert, Diaz, Maxfield and Ratley's (1995) of 35 participants. More of these rigorous case studies are needed to conduct in-depth research into the individual ways gifted students underachieve. Furthermore, as a significant amount of the research mentioned in this literature review was conducted in the 1980s and 1990s, there is an urgent need for more current research in this area. Even the main seminal paper on underachievement, mentioned in this Literature Review, by Reis and McCoach, is over ten years old. Classrooms have changed significantly in the last ten years and so have the children inside them. Strategies that suit the current generation of underachieving gifted students must be investigated.

Strategies That Have Informed the Creative Writing Program

The above literature has informed the methodological design of this study. Based on the literature that has proposed potential strategies for reversing underachievement in gifted students, the researcher has implemented the following strategies in the planning of the Creative Writing Program in order to investigate their effect on underachievement:

- smaller student-teacher ratio (Reis & McCoach, 2000, p. 164);
- positive student-teacher relationship (Reis & McCoach, 2000, p. 165; Rimm, 1995; Whitmore, 1980, p. 205);
- less conventional types of teaching and learning (Reis & McCoach, 2000, p. 164);

- a student-centred environment where the teacher is a "facilitator" not an "instructor" (Rowley, 2008, p. 36);
- choice of what to learn and how to learn it (Fine & Pitts, 1980, p. 53; Reis & McCoach, 2000, p. 165; Rowley, 2008, p. 36; Whitmore, 1980, p. 398);
- a holistic approach including family, school and student (Fine & Pitts, 1980, p. 54; Rimm, 1995);
- more challenging work engaging higher order thinking skills (Rafidi, 2008); and
- and promotion of self-efficacy or self-regulation (Reis & McCoach, 2000, p. 166).

Creative Writing Program

The aim of this study is to investigate the impact of the intervention strategy, the Creative Writing Program, on underachieving gifted students. The content could have been mathematics-based or science-based, however creative writing was chosen as this was an area in which both participants (underachieving gifted students) were underachieving. This also was the researcher's field of teacher-training (English). The Creative Writing Program was informed by the well-recognised elements of narrative: construction of main character, orientation (or introduction/opening), complication and climax, resolution (or conclusion). The emphasis of this study is not the content of the Creative Writing Program, but rather the practical teaching strategies within the Program that address underachievement. It is far beyond the scope of this literature review to discuss the various theories on creative writing.

Nonetheless, the researcher was guided by the 'Social Model of Writing', as proposed by Harris, McKenzie, Fitzsimmons and Turbill (2003). The basic premise of this model is to encourage conscious consideration of writing like a reader, and reading like a writer. According to Harris et al. (2003) there are four practices that proficient writers engage in: text encoder practices, text participant practices, text user practices, and text analyst practices (p. 40). It is when these four practices are performed simultaneously that skilful writing emerges. In the Creative Writing Program, the researcher explicitly drew attention to each of these practices.

Text encoding is the most basic element of writing and involves using the recognised structures of written English to put words together and punctuate to encode a text that can be read (Harris, et al., 2003, pp. 40-41). Text participant practices involve weaving meaning into a text, and relates directly to the encoding practice, as "[writers] do not encode for the sake of encoding. Rather [they] encode words in order to construct meaning" (Harris, et al., 2003, p. 42). The Creative Writing Program addressed these practices by emphasising the role of spelling, punctuation and grammar in encoding a written text that can be actually read and interpreted by someone else. It was also recognised that spelling, punctuation, grammar and word choice can greatly affect meaning and that these elements are crucial to writing a sophisticated text.

Text user practices refer to the purpose behind writing (Harris, et al., 2003, p. 42). Lessons in the Creative Writing Program explicitly dealt with the purpose of narrative and how to achieve that purpose in writing. The purpose of narrative could be informative or entertaining. The students were challenged to consider how they wanted their reader to feel as they read their story. The Creative Writing Program consistently reinforced and encouraged the students to consider the reader as they write.

Finally text analyst practices involve considerations about what the writer wants the reader to take away from the writing (Harris, et al., 2003, p. 43). The Program promoted this practice by encouraging the students to embed values into writing that influence their reader, especially regarding character construction or the shaping of the resolution.

Conclusion

It has been shown through this Literature Review that there is a significant amount of literature on defining the phenomenon of underachievement in gifted students. Gagné's (1993, 2007) definition of giftedness has been shown to be particularly useful for understanding the phenomenon of underachievement in gifted students. Gifted students who underachieve have exceptional potential, but have been unable to translate that potential into demonstrated performance. Furthermore, Reis and McCoach's (2000) definition of underachievement in gifted students has informed the researcher's identification and selection of underachieving gifted students for this study.

Though there is a wealth of research into identification and profiling of underachieving gifted students, this Literature Review has highlighted that though there is some, there is not enough, current research into the practical strategies for intervention. The Australian Senate Select Committee report (2001) revealed that up to half of the gifted population underachieve. These Australian statistics indicate that it is of paramount importance that research is conducted into investigating successful ways to reverse underachievement in gifted students.

The literature has indicated that there is a trend towards more qualitative research methods. This is important as previous research findings consistently emphasise that underachieving gifted students are a diverse group and require an individualised approach to investigating intervention strategies (Reis & Renzulli, 2009, p. 233; Senate Select Committee, 2001, p. 11). Qualitative research, according to Denzin and Lincoln (2011):

> "stress[es] the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry. Such researchers emphasize the value-laden nature of inquiry... They seek answers to questions that stress how social experience is created and given meaning" (p. 8).

It is qualitative knowledge that researchers need to seek out in regards to underachieving gifted students. Quantitative knowledge alone is inadequate to describe the individual ways underachievement manifests in gifted students. Qualitative knowledge is individualised and can add to the body of knowledge of successful practical strategies for the remediation and reversal of underachievement in gifted students.

This study is one such research project. The study documented in this thesis has been informed at every stage by previous research findings, as outlined in this Literature Review, and has incorporated practical strategies as suggested by the literature in the planning and delivery of the Creative Writing Program. The purpose of this study is to investigate the impact of the researcher's Creative Writing Program on two underachieving gifted students, through two in-depth case studies. The secondary aim of the study is to identify the practical strategies that have been successful for the remediation and reversal of underachievement in those students. The qualitative

method employed by the researcher to investigate these research questions is the focus of the next chapter (Chapter 3 – Methodology).

CHAPTER 3: METHODOLOGY

The research study, documented in this thesis, is an in-depth case study which has adopted a qualitative design. Data were gathered from multiple perspectives and sources to answer the following research questions:

- What is the impact of a Creative Writing Program on an underachieving gifted student?
- What teaching strategies are successful in facilitating the achievement of potential in an underachieving gifted student?

Primarily, this study is concerned with gifted students who underachieve. The researcher trialled the Creative Writing Program, an intervention strategy for underachieving gifted students, with two Year 7 students through a case study method. In order to investigate the impact of the Creative Writing Program on the underachieving gifted students, data were gathered at the beginning, during, and at the end of the Program. The data that were gathered to answer the above research questions include: researcher's field notes and observations, interviews with student-participants, interviews with teachers, interviews with parents, school documents and work samples, and qualitatively evaluated pre- and post-tests. These data were rigorously analysed using grounded theory principles and an open-coding approach to discover recurring themes which determined the findings of the study.

This chapter is concerned with the following: the natural setting of the study; describing the participants and the selection criteria applied; and the qualitative evaluation criteria that establishes this study as valuable and quality research. This chapter will also outline the data gathering and data analysis processes used in this research study.

The Natural Setting of the Study

The Creative Writing Program took place in April and May, 2011 in a private school in the Lake Macquarie region of New South Wales, Australia. The period of data gathering, however, extended between March and July (before and after the Creative Writing Program). The lessons that constituted the researcher's Creative Writing Program took place in a quiet room within the school's Research and Library Centre.

The private school, which will remain unnamed to ensure privacy of the participants, has over 900 students enrolled; approximately half of these students are in the secondary school. In Year 7 (both of the participants are from Year 7) there are 4 classes. Classes are streamed according to ability in English and Maths only; all other subjects are organised in mixed ability classes. There are some programs available for gifted students in Mathematics and debating. Students who have been nominated for these programs by their teachers attend between one and three periods in a fortnight. With the above exceptions, gifted students are taught in mainstream classes with mixed ability peers.

The mission of the school is to encourage a passion for learning in their students. The school has a strong community focus, supporting service learning opportunities. Furthermore, students who attend this school are given a high-quality personal laptop for school use. The school has blended learning opportunities, with some online delivery, particularly for homework. The school is well-resourced in terms of both staffing, infrastructure and resources.

Teaching strategies employed in this school are influenced by the subject and teacher. In general, the school supports teaching strategies that employ increased use of Information and Communication Technologies (ICT). The participants' Year 7 English teacher is well educated, completing her PhD recently. Observation of her classroom in operation indicates that she employs a range of teaching strategies that promote student-centred learning opportunities. The Year 7 English teacher, given the pseudonym Dr Smith, also regularly uses online learning and gives regular opportunity for students to use their school laptops in class.

Ethics Clearance

Application for Ethical Clearance of Research Projects Involving Human Participants was made to Avondale College of Higher Education Human Research Ethics Committee (HREC), and obtained on 14 April, 2011 (Appendix 1).

The main area of risks for the student-participants of this study was that they could potentially miss specific instruction in a Key Learning Area due to being withdrawn from class. This risk was minimised by alternating the classes from which the student-participants were withdrawn. The student-participants were not withdrawn from the same class more than three times over the research period. Furthermore, the school had already implemented the withdrawal of some gifted students for extension Mathematics programs so procedures were already in place to ensure students could easily catch up on work missed in class.

There were no major risks for the other participants (teachers, parents and researcher) of this study.

Participant Selection Process

Participants in this study included two enrolled students from a private school. As two students were available for participation, and met the criteria (discussed below), both students were asked to participate in this study as they presented as quite different cases of underachievement. Thus, two case studies were conducted, with two sets of findings (Chapters 4 and 5).

These students participated in the Creative Writing Program for seven weeks, and consented to interviews during this time (as did their parents, on their behalf). To ensure the researcher gathered comprehensive data on these two students, teachers and parents were invited to participate in this study through audio-recorded interviews also. It is important to acknowledge that the researcher was also a participant in this study, and the researcher's field notes and observations were part of the data gathering process.

The process of selecting participants for the study was guided by set criteria that were informed by the literature on giftedness and underachievement (see Appendix 2). The process of purposeful sampling of information-rich cases was employed to investigate deeply the phenomenon of underachievement in two gifted boys (Patton, 2002, p. 230). Students were considered for participation in this research project if they were 12-14 years of age, preferably in Year 7 or Year 8

(so as not to impinge on any major external assessments). For the student to be eligible for participation, he or she must have appropriate documentation to support the notion that he or she is gifted. Appropriate documentation could include results from psychometric testing, or results from school-based standardised testing. Reis and McCoach (2000) state these tests can provide "documented, empirical evidence of reliability" (p. 154), and can be important in the identification of gifted students.

However, no test is perfect, as Reis and McCoach (2000) acknowledge. To accompany quantitative standardised test results, qualitative evidence must support the notion that the student is gifted. Worrell (2009) supports this notion, arguing that a single quantitative standardised scores is inadequate for measuring giftedness. For this reason, the student must have been recommended for involvement in the Program by qualified professionals. The recommendation of the Year 7 English teacher was accepted, as she has significant teaching experience and extensive involvement with Gifted and Talented Programs. This recommendation was also corroborated by the students' primary school teacher who ran a Gifted and Talented Extension Program in which both students participated.

In order to be eligible for participation in this study on underachieving gifted students, the gifted student must also have been identified as underachieving. The criteria for underachievement was informed by Reis and McCoach's (2000) definition: underachievement is a "discrepancy between expected achievement... and actual achievement" that "persist[s] over an extended period of time" (p. 157). Because of these explicit criteria, the researcher was guided again by the recommendation of the Year 7 English teacher and primary school teacher, both of whom had experience in dealing

with gifted students. The researcher used Betts and Neihart's (1988) 'Profiles of the Gifted and Talented' as a tool for identifying underachievement in gifted student.

There were two students who fulfilled these criteria. It was completely coincidental that both were male. Both participants were identified to be underachieving in the area of creative writing. Rather than choosing one participant, the researcher accepted both participants and conducted two separate case studies. Selection of the two participants was not based on an intention to compare the two participants but both were included in the study in order to explore the consequences of the Creative Writing Program on the two students. Below each of the participants are described in the context of their involvement in this study.

Participants

The participants in this study included two underachieving gifted students from Year 7, three of the students' parents, two of the students' teachers and the researcher.

Nathaniel (Case Study Participant 1)

Participant 1, for the purpose of this thesis, will be referred to using the pseudonym Nathaniel. Nathaniel is an 11 year-old highly gifted boy in Year 7. It is worth noting that he is a full year younger than his cohort. Nathaniel is extremely gifted in the areas of Science and Mathematics. He

was psychometrically tested in 2005, at the suggestion of his kindergarten teacher. Nathaniel was administered the Stanford-Binet Intelligence Scale (4th ed.). His score was in the "Superior" range for two of the four sub-test categories (Verbal Reasoning and Short-Term Memory); and in the "Very Superior" range for the remaining two sub-test categories (Abstract/Visual Reasoning and Quantitative Reasoning). This gave Nathaniel an overall Test Composite Score in the "Very Superior" range, ranked in the 99.91st percentile. Nathaniel's "Standard Age Score" has been approximated to be 150. In Gagné's (1993) terms, Nathaniel has distinctly above average natural aptitude or potential. Both teachers involved in the study corroborated this, giving further evidence of Nathaniel's giftedness. He is, unequivocally, a gifted student.

Nathaniel's school records indicate that his performance in standardised literacy tests is exceptional, scoring in the 97th and 99th percentile rank in the Progressive Achievement Test (PAT) for Vocabulary and Reading, respectively. His Online Placement Instrument (OPI) tests results show Nathaniel to be in the 100th percentile rank. These school-based standardised tests compare a student's performance in relation to the expected performance of their peer group, and show Nathaniel's potential to be exceptional in the area of English.

Despite high potential, as demonstrated through his exceptional school-based standardised test results, Nathaniel is an underachieving gifted student, particularly in English and creative writing. His recent demonstrated performance in writing tasks does not match his potential: he scored 13.5 out of 20 for an in-class creative writing task. According to his English teacher, this result is typical of his overall demonstrated performance in writing tasks, especially creative writing. Although this is a comfortable pass for this subject, it is obvious that the student is not performing to his greatest potential. Both teachers involved in this study confirmed that Nathaniel's inability to showcase

exceptional demonstrated performance in the area of creative writing has been long-term. Thus, Nathaniel fulfilled the aforementioned criteria for participation in this study: Nathaniel is an underachieving gifted student.

In order to better understand the specific case of underachievement, the researcher considered Nathaniel in the context of Betts and Neihart's (1988) 'Profiles of the Gifted and Talented', and identified that he partially fulfilled the criteria for Type I, The Successful gifted. Betts and Neihart (1988) describe Type I as having "learned the system" (p. 249). According to Betts and Neihart (1988) Type Is: tend to become bored; they do what needs to be done but "fail to learn needed skills and attitudes for autonomy" and thus struggle to explore their imagination (p. 249). The researcher's application of this literature provided further insight into both Nathaniel's giftedness and underachievement.

Nathaniel's participation in this study included: involvement in the researcher's Creative Writing Program for a period of seven weeks (totalling eight 50 minute sessions); an interview at the beginning of the Program (Appendix 3); an interview at the end of the Program (Appendix 4); the completion of a pre-test (Appendix 5); and the completion of a post-test (Appendix 6).

Luke (Case Study Participant 2)

Participant 2, for the purpose of this thesis, will be referred to using the pseudonym Luke. Luke is a thirteen year-old gifted boy in Year 7. His age is typical of his cohort. He is gifted in the area of

creative writing. He has not been formally psychometrically tested. Luke's giftedness is difficult to test for as his performance can be completely inconsistent in written tests. This was substantiated through evidence from Luke's mother and teachers. Research does support the contention of "multiple criteria" being used to determine giftedness (Reis & McCoach, 2000, p. 154). Often a single standardised score is not an adequate descriptor of giftedness (Worrell, 2009, p. 242). This is certainly true for Luke.

Evidence from Luke's teachers supported the notion that Luke is gifted. In primary school, Luke was acknowledged as gifted by his teachers and included in the school's Maths Gifted and Talented program. Access to Luke's school records which document his academic progress, indicated that his performance in recent standardised literacy tests is very good, scoring in the 90th percentile rank in the Progressive Achievement Test (PAT) for Vocabulary, and his Online Placement Instrument (OPI) tests results showed Luke to be in the 92nd percentile rank. From these sources of evidence, it can be concluded with significant assurance that Luke fulfils Gagné (1993)'s definition of a gifted student as he clearly shows high potential, and thus was eligible for involvement in this study.

Luke, however, can be entirely inconsistent in achieving his potential. Though ranking in the 90th percentile (and above) for some school-based standardised tests, he ranked in the the 66th percentile for Progressive Achievement Test (PAT) Reading. His potential is clearly high, albeit inconsistently demonstrated across. In a recent in-class creative writing task, Luke scored 16 out of 20. However, his English teacher asserts that this is not typical of his overall demonstrated performance in creative writing tasks. Luke's English teacher, who will be referred to as Dr Smith, describes several situations where Luke rushed through a task as quickly and superficially as

possible, or alternatively wastes a significant amount of time before starting a task. Both Luke's parents and English teacher identified this to be an ongoing and long-term problem. Underachievement is defined by a long-term discrepancy between demonstrated performance and the incredibly high potential of the student (Reis & McCoach, 2000, p. 157). Based on this evidence, it can therefore be concluded that Luke is an underachieving gifted student.

In order to better understand the specific case of underachievement, the researcher considered Luke in the context of Betts and Neihart's (1988) 'Profiles of the Gifted and Talented', and identified that he partially fulfilled the criteria for Type II, The Challenging gifted. Betts and Neihart (1988) describe Type II as "divergently gifted" and for this reason their giftedness is often not acknowledged by schools (p. 249). According to Betts and Neihart (1988) Type IIs: are creative; tend to struggle with conforming to the structures of school; typically demonstrate a negative self-concept; often demonstrate inconsistency; and are "at risk" (p. 249). The researcher's application of this literature provided further insight into both Luke's giftedness and underachievement.

Luke's participation in this study included: involvement in the researcher's Creative Writing Program for a period of seven weeks (totalling six 50 minute sessions); an interview at the beginning of the Program (Appendix 3); an interview at the end of the Program (Appendix 4); a pre-test (Appendix 5); and a post-test (Appendix 6).

Teachers

Nathaniel and Luke's English teacher, given the pseudonym Dr Smith, was invited to participate in the research study. She has extensive teaching experience and specialised experience with Gifted and Talented Programs and gifted students. Furthermore, Dr Smith had the expertise to comment on these areas, as she had recently completed her doctorate in the Education field. Dr Smith was interviewed at the beginning of the Program (Appendix 7), and again at the end of the Program (Appendix 8).

The other teacher who participated in this study was Mrs Jones. She had taught both Nathaniel and Luke in primary school (recently) and was responsible for the Maths Gifted and Talented Program in which both boys participated in. She has extensive teaching experience with gifted students. Mrs Jones was interviewed once at the beginning of the Creative Writing Program (Appendix 7). As she was not currently teaching Nathaniel and Luke by the end of the Program, she was deemed to be not suitable to interview at the end of the Program as she would not be able to comment on the impact of the Program on the two students.

Parents

Parents of each student-participant were invited to be involved in the research study. Parental consent was sought from each parent for the participation of their child. Nathaniel's mother consented to be interviewed once (Appendix 9). Luke's father was interviewed at the beginning

(Appendix 10) and end of the Creative Writing Program (Appendix 11), and Luke's mother was interviewed once (Appendix 9).

Researcher

The researcher's participation in this study involved teaching the Creative Writing Program to each of the student-participants, separately. The researcher designed this Creative Writing Program, and during the case study, reflected critically on the observable impact the Creative Writing Program was making on the two participants. The researcher's observations and field notes were included as data gathered during this study. These observations and field notes were analysed alongside the data gathered during interviews with the students, teachers and parents.

The Researcher's Creative Writing Program

The Creative Writing Program was planned as a one-to-one part-time withdrawal program. Both Nathaniel and Luke had timetabled classes with the researcher. The timetabling was planned so that Nathaniel and Luke would not be withdrawn from the same class repetitively, but would miss different classes on a rotating basis.

The table below shows the topic of the lessons and the dates the lessons were conducted. Nine lessons in total were planned. However, the table below shows that Nathaniel attended eight, and Luke attended six lessons. These absences were due to sickness or unavoidable absences.

Table 3.1: The Creative Writing Program Lesson Schedule

Week	**Lesson and Topic**	**Participant in Attendance**
1	Lesson 1 (29/04): Pre-Test	Nathaniel and Luke
2	Lesson 2 (02/05): Main Characters	Nathaniel and Luke
3	Lesson 3 (09/05): Opening Paragraphs	Nathaniel and Luke
	Lesson 4 (11/05): Purpose and Plot	Nathaniel and Luke
4	Lesson 5 (18/05): Climax, Complication	Nathaniel
5	Lesson 6 (23/05): Summary and Self-Evaluation	Nathaniel
	Lesson 7 (26/05): Post-Test	Nathaniel
6	Lesson 5 (31/05): Climax and Complication	Luke
7	Lesson 8 (09/06): Post-Test	Nathaniel and Luke

The researcher was not investigating the value of the content of the Creative Writing Program; rather she was examining the impact that the practical teaching strategies had on the two gifted students who were selected to participate in the study. The content of the Creative Writing Program was informed by the Social Model of Writing, as described by Harris, McKenzie, Fitzsimmons and Turbill (2003), which encouraged students to write as readers, and read as writers. Each lesson

covered a well-recognised key component of narrative (such as main character and plot development).

It is important to note that the researcher was not attempting to separate any of the tutoring strategies from the Program. One of the tutoring strategies (later referred to as one-to-one teaching) was integral to the part-time withdrawal program that the researcher was testing.

Pedagogically, the Creative Writing Program was informed by the literature, the students' characteristics and the researcher's personal style of teaching. Based on teacher and researcher observations, and interactions with Nathaniel and Luke, their learning styles and interests were ascertained and incorporated into the delivery of the Creative Writing Program. For Nathaniel, the researcher taught creative writing as a formula, to engage his mathematical-rational learning style. For Luke, the researcher engaged Luke's interest in computers and his intrapersonal learning style by encouraging him to publish his creative writing on a blog (an online log or journal).

The researcher's personal style of teaching encouraged discussion-based learning, demonstration strategy, and the use of ICT. The literature indicated that the following strategies could be successful in remediating underachievement in gifted students:

- smaller student-teacher ratio (Reis & McCoach, 2000, p. 164);
- positive student-teacher relationship (Reis & McCoach, 2000, p. 165; Rimm, 1995; Whitmore, 1980, p. 205);
- less conventional types of teaching and learning (Reis & McCoach, 2000, p. 164);
- a student-centred environment where the teacher is a "facilitator" not an "instructor" (Rowley, 2008, p. 36);

- choice of what to learn and how to learn it (Fine & Pitts, 1980, p. 53; Reis & McCoach, 2000, p. 165; Rowley, 2008, p. 36; Whitmore, 1980, p. 398);
- a holistic approach including family, school and student (Fine & Pitts, 1980, p. 54; Rimm, 1995);
- harder work engaging higher order thinking skills (Rafidi, 2008); and
- promotion of self-efficacy or self-regulation (Reis & McCoach, 2000, p. 166).

Evaluation Criteria for the Study

In order to ascertain the quality of this qualitative research study, evaluation criteria that suit the "qualitative research paradigm" must be considered (Golafshani, 2003, p. 600). Golafshani (2003) argues that quantitative evaluation criteria, including "validity" and "reliability", are not adequate tools to measure and evaluate a qualitative study, as qualitative research searches out a different kind of knowledge to that of a quantitative study (p. 600). The evaluation criteria, used for this study, have been informed in part by the Social Construction and Constructivist Criteria, as described by Patton (2002), Lincoln and Guba's (1986) theory for assessing the quality of qualitative research, and the criteria suggested by Golafshani (2003). The three key principles used to evaluate this study, delineating it to be of quality, include: credibility (including dependability, authenticity and reflexivity), trustworthiness and transferability. Oftentimes terms overlap, due the varying definitions applied to them, below these terms are described in application to this study.

Credibility

Credibility is described as equivalent to the quantitative evaluation criteria of internal validity, according to Lincoln and Guba (1986, p. 76). It implies the notions of dependability and authenticity. Dependability, according to Patton (2002), refers to the systematic and rigorous methods used in the study, and authenticity refers to the credibility of the researcher including acknowledgement of bias.

Credibility has been attained through the systematic and rigorous use of triangulation. Triangulation has been defined as the "capture and report[ing] of multiple perspectives rather than seek a singular truth" (Patton, 2002, p. 546). Creswell (2005) states that triangulation "improves the accuracy" of the findings of the study. In order to triangulate, the researcher has captured the multiple perspectives of each of the participants, their teachers and their parents. Triangulation was employed also in the data analysis processes through the use of two coders, the researcher and her supervisor. The themes that emerged through data analysis were corroborated, or triangulated, from multiple sources and perspectives. To further show credibility of researcher's data gathering and analysis processes and the subsequent findings, the study was regularly reviewed by a person outside of the study, the researcher's supervisor. This external audit is suggested by both Creswell (2005) and Patton (2002) as a way to also indicate the dependability, or credibility, of the study.

Furthermore, the researcher acknowledged and included her own perspective through the inclusion of field notes as data. The recognition of the researcher's context and participation within the study, implies the notion of reflexivity further supporting the credibility of this study (Patton, 2002, p. 546). Denzin (1989) states that the combination of multiple sources and perspectives (as the

researcher has shown in this study) combats biased findings that result from a single-source or single-perspective (p. 307).

Credibility of the researcher or inquirer is the second component of credibility. The researcher, at the time the study was conducted, was in the final year of a double degree in secondary teaching, where she was double-majoring in English and History. The researcher had no personal connection with the two student-participants that may have influenced her findings. The researcher did have a connection with the Year 7 English teacher, referred to as Dr Smith. Throughout the study, the researcher conferred with Dr Smith regarding the progress and apparent findings as a result of preliminary data analysis. Creswell (2005) defines this as "member-checking" (p. 252). Patton (2002), identifies this process, of encouraging participants to review and confirm findings, as another form of triangulation. The study was not funded, but rather completed to fulfil the requirements for the researcher's Honours in Education. Through the evidence presented it has been shown that this study fulfils the criteria of credibility.

Trustworthiness

Trustworthiness relates closely to credibility and for this reason will be consider briefly. Recognising that objective truth is unattainable in an in-depth qualitative case study, Lincoln and Guba (1986), claim that honesty and fairness are indicators of trustworthiness. Guba (1981) suggests the recognition of multiple perspectives is an indicator of trustworthiness, which is exemplified in this study through the multiple perspectives sought. The inclusions of findings that are in controversy with the predominant or main findings are also presented in the Findings

chapters (Chapter 4 and 5). According to Guba (1981), this balance and fairness indicates the fulfilment of the trustworthiness criteria. The researcher was true to the patterns that appeared to be present in the data, and according to Patton (2002), this denotes trustworthiness (p. 578).

Transferability

The problem with small, but purposeful sampling is that results cannot be generalised to the broad population. However, according to Lincoln and Guba (1986), "the trouble with generalisations is that they don't apply to particulars". This study does not claim to generalise findings to the population of underachieving gifted students based on the two in-depth case studies. However, Stake (1978) argues that such findings on particulars are important contributors to general knowledge. The findings of this study contribute to the body of knowledge on underachieving gifted students. Rather than generalise to the diverse population that constitutes the underachieving gifted demographic, this study suggests potential applications of these findings. To ensure this study fulfils the requirements for transferability, these principles have been considered in the Discussion and Recommendations chapter (Chapter 6), particularly in the recommendations for practice.

Data Gathering

This study is an in-depth case study adopting a qualitative design. Qualitative research, as defined by Creswell (2005), refers to "a type of educational research in which the researcher relies on the views of the participants, asks broad, general questions, collects data consisting largely of words (or text) from participants, [and] describes and analyses these words for themes" (p. 39). Because the qualitative researcher cannot separate themselves from this process, it must be acknowledged that the researcher also "conducts the inquiry in a subjective, biased manner" (Creswell, 2005, p. 39). The case study method implies "the collection of very extensive data to produce understanding of the entity being studied" (Burns, 2000, p. 460).

The researcher gathered data from a range of sources and perspectives before, during and after the implementation of the Creative Writing Program. The data gathered included: semi-structured interviews, field notes and observational data, pre- and post-tests, and academic records. Table 3.2 shows the data that were gathered to answer the research questions of this study. Following this table, each source of data gathering is described in the context of this study.

Table 3.2: The Relationship between the Research Question and the Data Gathered

Research Question	**Data Gathered on Nathaniel**	**Data Gathered on Luke**
What is the impact of the Creative Writing Program on an underachieving gifted student?	Semi-structured interview/s with: • Nathaniel, at the beginning and end of the Program • Nathaniel's English teacher, at the beginning and end of the Program • Nathaniel's mother • Nathaniel's primary school teacher Observational data and field notes Pre- and Post-Test School documents	Semi-structured interview/s with: • Luke, at the beginning and end of the Program • Luke's English teacher, at the beginning and end of the Program • Luke's father, at the beginning and end of the Program • Luke's mother • Nathaniel's primary school teacher Observational data and field notes Pre- and Post-Test School documents
What teaching strategies are successful in facilitating the achievement of potential in an underachieving gifted student?	Semi-structured interview/s with: • Nathaniel, at the beginning and end of the Program • Nathaniel's English teacher, at the beginning and end of the Program • Nathaniel's mother • Nathaniel's primary school teacher Observational data and field notes	Semi-structured interview/s with: • Luke, at the beginning and end of the Program • Luke's English teacher, at the beginning and end of the Program • Luke's father, at the beginning and end of the Program • Luke's mother • Nathaniel's primary school teacher Observational data and field notes

Semi-structured Interviews

Semi-structured interviews were conducted towards the beginning of the Creative Writing Program, with the student-participant (Appendix 3), parent/s of the participant (Appendix 10), the participants' English teacher (Appendix 7), and the participants' primary school teacher (Appendix 7). In order to assess the impact of the Creative Writing Program on the participants, semi-structured interviews were also conducted towards the end of the Creative Writing Program with the student-participants (Appendix 4), parent/s of the participants (Appendix 9 and 11) and the participants' English teacher (Appendix 8). The researcher transcribed each of these interviews.

According to Creswell (2005), the benefit of conducting interviews is to give all participants the opportunity to voice their personal perspective and elaborate on responses to interview questions (p. 361). The purpose an interview, according to Patton (2002) is to "enter into the other person's perspective" (p. 341). The development of the semi-structured interview guide for this study was based on Betts and Neihart's (1988) 'Profiles of the gifted and talented', and Whitmore's (1980) research. The interview questions prompted the interviewee to recount feelings, thoughts, perceptions, anecdotes relating to evidence of giftedness and underachievement in the student-participant. The researcher maintained a flexible approach to interviews and deviated from the interview guide at times to encourage the interviewee to elaborate on a given answer, or provide further substantiation for their claim. Due to time constraints on the research study, some interviews were conducted by email towards the end of the study.

Observations and Field Notes

The researcher took field notes based on observation of the participants during the course of the Creative Writing Program. A total of six observations were taken of Luke, and eight observations of Nathaniel. These observations consisted of comments the students made regarding their involvement in the Creative Writing Program and perceptions noted by the researcher regarding the students' involvement in various activities. The purpose of the field notes were to supplement other data gathered throughout the study and to provide a point of corroboration during the data analyses processes.

Pre- and Post-Tests

The pre- and post-test were delivered to the student-participants by the researcher, in order to determine the impact of the Creative Writing Program on their creative writing ability. Both the pre-test and the post-test were formatted identically. The student-participant was given 40 minutes to compose written responses to two questions. The first question involved writing a short story based on a written or visual stimulus. The second question involved listing the main elements of a story in dot points from a written or visual stimulus. Figure 3.1 is an example of a question that appeared in the pre-test.

Question 1: “A figure appeared. A long black cloak covered his body, neck to knee. Except for the glint of silver at his hip, where a fierce sword hung, ready to be drawn.”

Write a short story around this quote. You may choose it as your opening or closing line, or place it somewhere significant in your story. If you choose to do a plan for this question, make sure you clearly indicate where this quote would be used.

Figure 3.1: Example Pre-test Question

Academic Records

The student-participants’ academic records that were gathered for this study were predominantly school documentation. This school documentation included quantitative data about the students’ achievement and progress. These records provided evidence of giftedness and underachievement in Nathaniel and Luke, including the results from Nathaniel and Luke’s Online Placement Instrument (OPI) test. The OPI is developed by Australian Council for Educational Research for testing generic skills in English and Mathematics and provides a percentile ranks for students. The other standardised test documentation that was gathered by the researcher included the Progressive Achievement Test (PAT) for Vocabulary and Reading. Permission was gained from the parents of the participants, for the researcher to access these documents (Appendix 12). These documents were provided by the Year 7 English teacher, Dr Smith. She also provided class marks, from creative writing tasks, for both participants.

Nathaniel had been psychometrically tested, and the quantitative and qualitative feedback from this test was given to the researcher by Nathaniel's mother. Other academic records gathered during this study include the students' work samples throughout the Creative Writing Program.

Table 3.3: Amount of Data Gathered on Nathaniel and Luke

Data Type	**Data Gathered on Nathaniel**	**Data Gathered on Luke**	**Approx. hours**
Semi-Structured Interviews	Nathaniel (two) Mrs Jones Dr Smith (two) Nathaniel's mother	Luke (two) Luke's father (two) Dr Smith (two) Mrs Jones Luke's mother	3 hr 30 min*
Pre-Test	Nathaniel sat one pre-test	Luke sat one pre-test	1 hr 40 min
Post-Test	Nathaniel sat two post-tests	Luke sat one post-test	2 hr 30 min
Observations (time with participants)	Observations for eight, 50 minute sessions	Observations for six, 50 minute sessions	11 hr 40 min
Documents	Psychometric Test English Results OPI, PAT Results Work Samples	English Results OPI, PAT Results Work Samples	NA

*Note: this estimate does not include the transcription of audio-recorded interview

Data Analysis

Data gathered from observations, field notes and interviews were analysed using the tools of Grounded Theory and Emergent Design. Grounded theory is a rigorous process of analysing the data in such a way that the data directs the process of analysis, as Creswell (2005) states on Grounded theory: "Based on analysing one set of data, the researcher obtains direction from the analysis from the next set of data... the researcher build categories systematically from incident to incident and from incident to category" (p. 396). Glaser (1992), one of the pioneers of grounded theory, challenges the more structured procedure his co-pioneer, Strauss, ventured towards. Glaser's Emergent Design practice of Grounded Theory allows the themes to emerge from the text without being directed into predetermine roles or relationships. This approach was implemented in this study.

The data gathering and data analysis processes overlapped. The first phase was a process of line-by-line open-coding, in order to remain "close to the data" at all times (Creswell, 2005, p. 234). At this stage, *in vivo* codes were used (the exact word and phrases of the participant). Charmaz (2006) defines the benefit of *in vivo* codes to "help us preserve participants' meanings of their views and actions in the coding itself" (p. 55). These words and phrases are 'emic' codes that obtained directly from the data itself (as showed below in Figure 3.2), as opposed to 'etic' codes result from the imposition of a pre-determined theoretical framework onto the data (Glaser, 1992). The researcher then attempts to bring unity to these codes, and clumps them together under an open code name. These processes were adopted throughout the data analyses processes in this study.

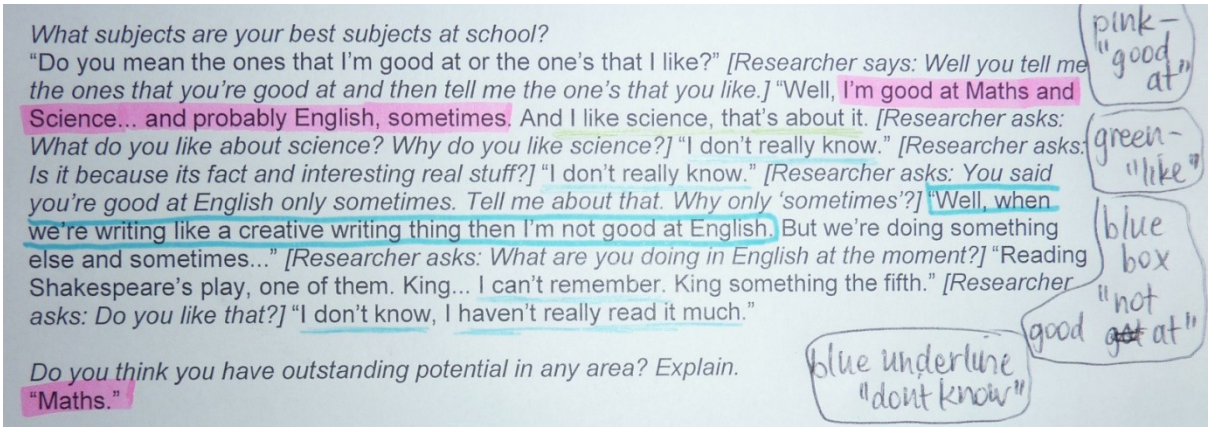


Figure 3.2: Example of Line-by-line Open-coding using *In Vivo* Codes

The second phase of coding is focused coding. According to Charmaz (2006), "focused coding means using the most significant and/or frequent earlier codes to sift through large amounts of data" (p. 57). The codes are linked together into categories. These categories are becoming increasingly more conceptual at this stage, than at the previous level of coding.

Strauss and Corbin (1998) describe the role of grounded theory to "build theory rather than test theory" (p. 13). Because of this, in the final phase of coding, the analyst begins to visually represent the emerging relationships between the categories coding. Creswell (2005) describes the process of this stage of coding to involve selecting one category as a central category and then delineating the relationship of that central category to the other categories (as shown below in Figure 3.3). Strauss and Corbin (1998) claim this visual representation is important because it "force[s] the analyst to move from working with the data to conceptualising" (p. 218). Rather than forcing these categories into pre-determined relationships, the research adopted a emergent design approach to allow the authentic relationships between these categories to emerge (Glaser, 1992). Connections between these categories were drawn within each piece of data. Furthermore, connections were found across all data sets, called themes, of which the findings of this study have directly emerged.

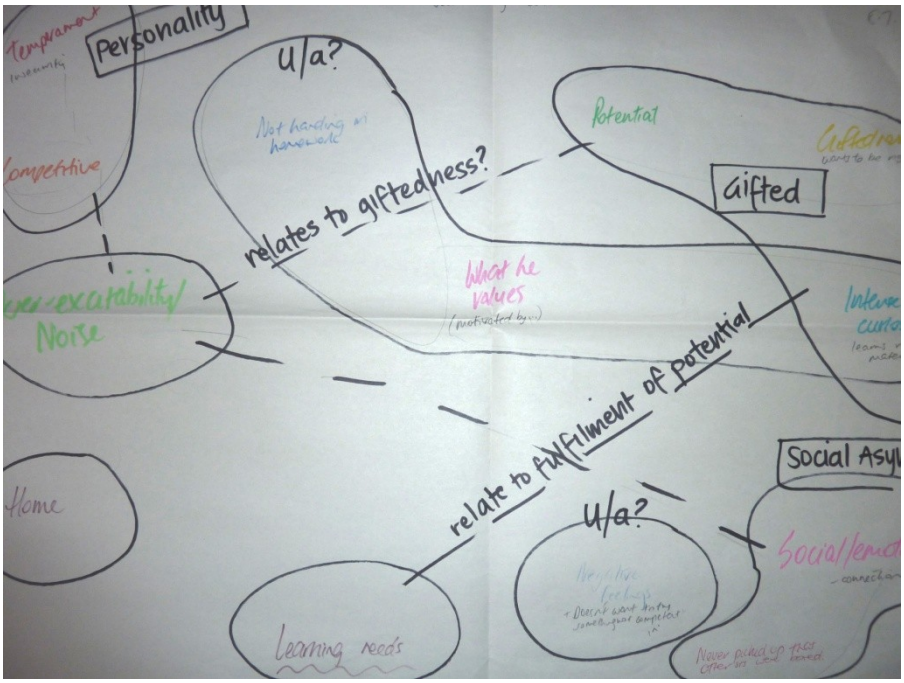


Figure 3.3: Example of the Final Phase of Coding and the Representation of Preliminary Relationships between Codes

The pre- and post-tests and work samples were analysed according to a set of pre-determined criteria (Appendix 13) that were developed by the researcher and loosely based on the NSW Board of Studies English Stage 4 Syllabus documents. To reduce bias, the pre- and post-tests were evaluated simultaneously in September (a significant amount of time after the completion of the Creative Writing Program). Two analysts provided qualitative feedback on the pre- and post-test for both students. At the time of initial evaluation it was not revealed which was the pre-test and which was the post-test, to further avoid bias. After initial evaluations were consider, it was revealed which was the pre- and post-test, so the analysts could further elaborate on their comments and draw comparisons. Figure 3.4 is a short sample of Nathaniel's written response for the post-test. Figure 3.5 is a short sample of Luke's written response for the post-test.

Peter's family was still missing. He tried to calm himself, but it wasn't working. He called them on the phone, but he didn't hear anything apart from 'leave a message on the beep,' that his sister recorded. They should be back by now. Peter thought that at some point, he would have to look for them. He just hoped that it wasn't now. He decided to wait for a bit longer, but he still didn't see them come out of the forest. Peter finally thought, "It looks like I'm going to have to search for them." He took a deep breath and stepped in to the forest.

Figure 3.4: Short Sample of Nathaniel's Creative Writing in the Post-test

He walked through the desolate wasteland in search of an oasis. His throat was as dry as the sand we walked on and his eyes where clouded by the constant sandstorms that rolled over him. He expected to only survive for the next few hours but as the tsunami of sand came towards him he started to doubt even that.

Kosmo was a decent minded, shabby looking 21 year old, who loved parties, adventure and always having something to do. He didn't really have any friends so that meant that he didn't trust or believe very many people. He lived in an apartment in a big city where lots of people roamed the streets, the apartment wasn't very big and the bathroom and kitchen where in the same room.

Figure 3.5: Short Sample of Luke's Creative Writing in the Post-test

Limitations of the Study

Despite every intention to ensure methods of data gathering and analysis were accurate, there were some unavoidable limitations to this study. Due to sudden timetable changes at the school some lessons that were scheduled with Nathaniel and Luke for the Creative Writing Program were cancelled. Sickness and other absences were also unavoidable. For this reason, every effort was made to catch up missed lessons; however this became increasingly difficult as the Program came to a close with time constraints due to deadlines.

Again, due to time limits, one-to-one interviews were not always possible, particularly towards the end of the Program. In order to gather these data, some email interviews took place. They have been analysed alongside other interview data. Hindsight has revealed that it may have been valuable to also observe the students in their normal classroom setting before commencing the Program to further substantiate interview data gathered at the beginning of the Creative Writing Program. However, due to the strict time constraints of this study, it was not possible to conduct any extra observations. Furthermore, it may have been beneficial to ask the participant to keep a journal to reflect on their experience of the Creative Writing Program in order to gather more data on the students' perspective.

Link to Findings Chapters

This chapter has outlined the methodology used in this study, including the qualitative data gathering methods and the open-coding approach to data analyses. The following chapters (Chapters 4 and 5) will present the findings of the two separate case studies. In so doing, the two research questions will be answered in the context of each student-participant. The first research question sought to investigate the impact of the Creative Writing Program on an underachieving gifted student. The second research question was concerned with the identification of practical teaching strategies that prove successful for reversing underachievement in gifted students.

CHAPTER 4: FINDINGS FROM CASE STUDY 1 - NATHANIEL

This chapter will describe the findings that emerged from in-depth analyses of the multiple sources of data gathered during the first case study with Nathaniel. By doing so this chapter will provide evidence to answer the following research questions:

- What is the impact of a Creative Writing Program on this underachieving gifted student?
- What teaching strategies are successful in facilitating the achievement of potential in this underachieving gifted student?

In order to answer the first research question, regarding the impact of the Creative Writing Program, Nathaniel is described at the beginning and end of his involvement in the Creative Writing Program. The purpose of these two descriptions is to clearly identify the influence the Program has had on the participant and thus answer the first research question. These descriptions have been informed by analyses of the following data gathered to provide a comprehensive picture of the impact of the Creative Writing Program:

- a pre- and post-intervention interview with Nathaniel;
- an interview with Nathaniel's mother;
- a pre- and post-intervention interview with Nathaniel's English teacher (who will be referred to as Dr Smith);
- an interview with another of Nathaniel's teachers (who will be referred to as Mrs Jones);
- a qualitatively assessed pre- and post-test; and
- observations from the researcher's field notes.

To answer the second research question, this chapter also documents the successful teaching strategies that facilitated the achievement of potential for the underachieving gifted participant, Nathaniel. Themes have been gleaned from analyses of the aforementioned interview data and the researcher's own observations. The practical strategies that resulted from comprehensive data analyses may provide ideas for future teachers dealing with similar underachieving gifted students.

As it is not the intention of this study to compare the characteristics of the two participants or their response to the Program, the findings from the two independent case studies will be dealt with in two separate chapters. Consequently, the research questions will be answered in terms of Nathaniel, the first case study (Chapter 4), and Luke, the second case study (Chapter 5). Nevertheless, findings from both studies will be considered side-by-side in the Discussion and Recommendations (Chapter 6) in order to draw commonalities that may help future teachers in their interactions with underachieving gifted students.

Overview of Nathaniel and his Involvement in the Creative Writing Program

Nathaniel is an 11 year-old gifted student in Year 7. As detailed in the Methodology chapter (Chapter 3), Nathaniel was psychometrically tested in 2005, and the results from this testing were considered as strong evidence of Nathaniel's giftedness. His results in school-based standardised testing, and evidence from both teachers included in this study further corroborated this. There is no doubt that Nathaniel is a gifted student. However, Nathaniel also exhibits underachievement, especially in the area of creative writing. His performance in in-class creative writing tasks is not

consistent with his exceptional standardised test results. This has been confirmed by Nathaniel's primary teacher and English teacher. Thus, Nathaniel is an underachieving gifted student.

Nathaniel's participation in the Creative Writing program involved eight sessions of approximately 50 minutes, over a period of seven weeks. Throughout the program, Nathaniel was guided through a series of creative writing tasks, towards eventual completion of his own short story.

Nathaniel at the Beginning of the Program

To establish Nathaniel's abilities and behaviour at the beginning of the Program, Nathaniel, his mother, his English teacher (referred to as Dr Smith), and another of Nathaniel's teachers (referred to as Mrs Jones) were interviewed before the commencement of the Program. These sets of data have been analysed separately, however recurring themes became apparent. These three themes, 'negative feelings', 'underachieving behaviours' and 'socially asynchronous development' are discussed from the multiple perspectives of the interviewees. Following these themes are findings based on an analysis of his pre-test results.

Negative Feelings

The most obvious theme that emerged from data analysis of the interview with Nathaniel was his repetitive negative phrasing and underestimation when describing himself. He would typically

respond to interview questions with words like “can’t”, “haven’t” and “don’t”, especially in reference to his abilities or interests. He repeated the phrase “I don’t know” often, and was notably slow-speaking.

This theme also emerged from an analysis of Nathaniel’s mother’s interview data. She explained that Nathaniel is painfully aware that he is “different” due to being “a clever kid”. This difference has made Nathaniel feel isolated at times, and instilled in him some negative feelings about attending school. She said he would come home crying saying, “Mummy, I don’t want to go back [to] school anymore... I don’t have much friend [sic.]”.

Conversely, analyses of data from Dr Smith, Nathaniel’s English teacher, indicated that Nathaniel’s attitude was generally positive, especially in terms of “doing the work”. Analysis of this data also revealed an apparent contradiction: Dr Smith also believed Nathaniel seemed to exhibit some apprehensions about the school environment. She further explained that there are times when he is not self-assured, and appears to be quite insecure. Similar themes emerged from analyses of data from Mrs Jones, who pinned these negative feelings to self-doubt. She had witnessed Nathaniel’s negative feelings and claimed he “doesn’t want to try something he’s not competent with”. Mrs Jones also indicated that Nathaniel genuinely doubts his ability at times, and this doubt generates negative feelings for him. She added that some of these negative feelings are quite likely related to his social interactions, which she described as “exhausting” for Nathaniel due to the large amount of effort he needs to exert during social interactions.

Figure 4.1 represents the theme of Nathaniel’s ‘negative feelings’ as it emerged from the data at the *in vivo* stage of coding. The interviewee’s own words and phrases have been represented as a word

cloud, substantiating that this is a key theme that has emerged from the separate analysis that was conducted using data gathered during each. These analysis processes were driven by the two research questions which directed the progress of this study. These word clouds have been used throughout the data analysis procedures as tools to identify major themes present in the data.

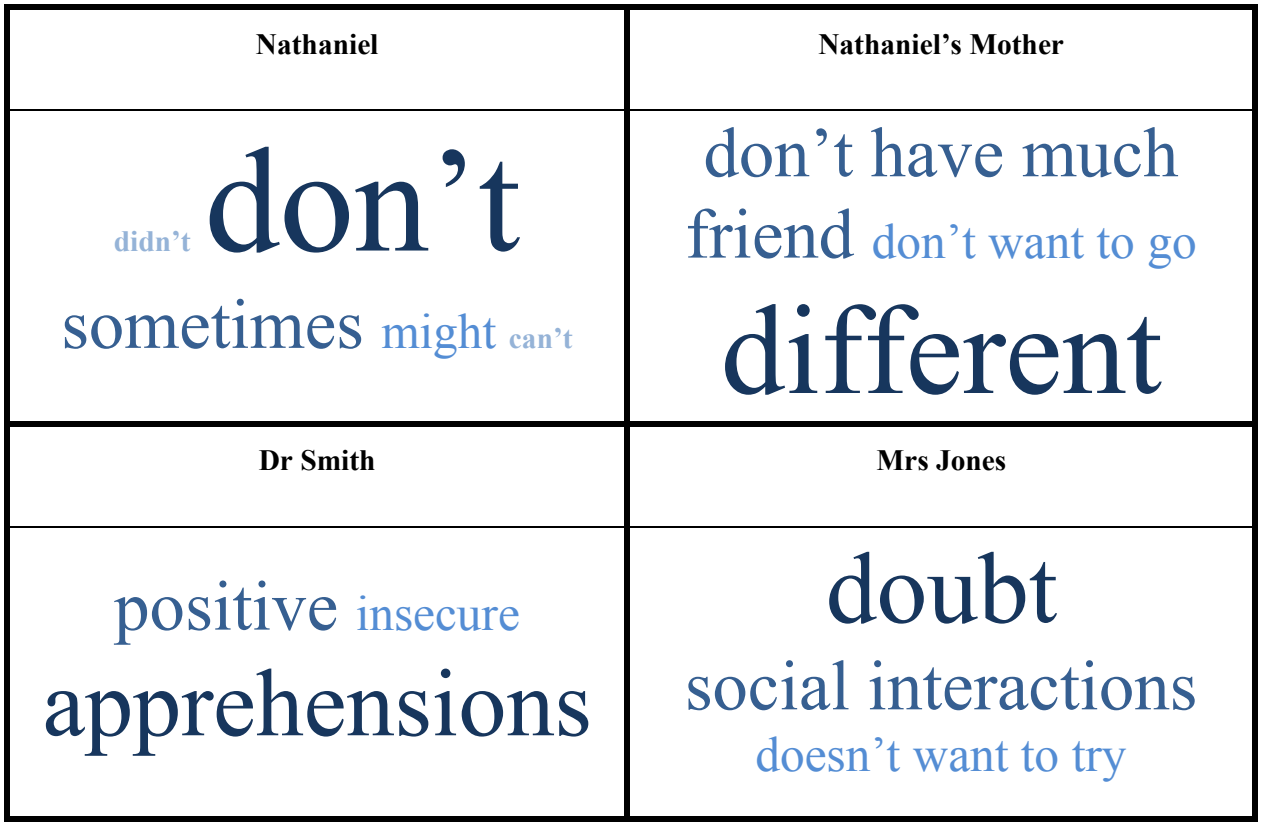


Figure 4.1: Word Cloud: 'Negative Feelings' (Beginning of Program - Nathaniel)

Underachieving Behaviours

In spite of these negative feelings, Nathaniel could still acknowledge that he was "smart", particularly in Mathematics and Science, but only "sometimes" good at English. This was

corroborated by analyses of all sources of data. Terms such as “perfectionist”, “bright”, “gifted” or “highly intelligent” emerged from analyses conducted on the data from Nathaniel’s mother and teachers. In spite of Nathaniel’s giftedness, data sources corroborated that Nathaniel displays some underachieving behaviours.

Though Nathaniel’s mother did not explicitly use the term “underachievement”, her responses showed an understanding of this concept in application to her son. A typical quote demonstrating her understanding of Nathaniel’s underachievement, particularly in creative writing, stated: “He get [sic.] so many ideas... so much going on in his mind and sometimes it’s so slow. He... couldn’t bring it out... verbally. But it’s all [in] his head.” She explained that Nathaniel thinks deeply but cannot seem to express his thoughts in writing.

Analyses of the data gathered during an interview with Nathaniel’s English teacher further verified that Nathaniel does not achieve according to his potential in English, especially in the area of creative writing. Dr Smith recounted an incident where Nathaniel was given a class-task where he was instructed to adopt a persona from the set text and describe an account from that persona’s perspective. She commented, “He couldn’t even decide in that class what persona to adopt, let alone what to write... He wrote something, not wonderful... He found positioning himself in another’s skin an amazing challenge – he couldn’t do it.” One of Nathaniel’s behaviours, that appear to contribute to this underachievement, is his inability to express his ideas. Nathaniel is highly capable, as all data sources confirmed, however his wastage of class time has affected his ability to showcase his potential in demonstrated performance.

Data analysis also revealed that both teachers agreed that Nathaniel had problems handing in homework on time. Mrs Jones says this was because “he didn’t feel it was good enough”. Analysis of data from an interview with Nathaniel’s mother confirmed that this was a typical behaviour of Nathaniel’s that appeared to be contributing to his underachievement.

In summary, data analyses of multiple sources of data consistently revealed that Nathaniel exhibited some underachieving behaviours (despite being gifted), particularly in the area of creative writing. These behaviours were obstructing the achievement of his potential. Figure 4.2 is a word cloud representing the *in vivo* codes from the participants’ own words that emerged through data analyses which revealed the emergent theme ‘underachieving behaviours’.



Figure 4.2: Word Cloud: 'Underachieving Behaviours' (Beginning of Program - Nathaniel)

Socially Asynchronous Development

The data analysis processes revealed that Nathaniel's perception of his social relationships was that they consisted of "just a few closer friends". Further insight into his social development was gained

through analysis of his mother's interview data. Similar themes emerged from analysis of data gathered during her interview. She recounted Nathaniel saying to her "I couldn't fit into them and I don't have much friend [sic.]". Nathaniel's mother described her son's interactions with peers, and said that often Nathaniel's interests are divergent to those of his classmates. He would talk to them and they would "disperse". She commented that he is "so confined to... the books and all the facts" and exhibits "low social skills".

The difficulty with which Nathaniel relates socially was further substantiated through evidence from his teachers, Dr Smith and Mrs Jones. Analyses of data from an interview with Mrs Jones revealed Nathaniel to have struggling social relationships because: "He understands he's different, but doesn't have any sense of because-I'm-different-other-people-find-it-hard-to-connect-to-me". Dr Smith highlighted that Nathaniel's social development seems to be asynchronous to his intellectual development. Analyses of the data gathered from both teachers suggested Nathaniel has a tendency to be a social isolate. Dr Smith said, "I've listened to him outside the classroom, engaging with kids at recess, for example, and he talks to them about mathematical formulas". She identified that he appears to have some insecurities about social situations and group work.

Mrs Jones also described an incident in primary school where Nathaniel was to give a show-and-tell presentation:

> "He gave a little Science lesson on what's needed for fire to burn... And he wanted students to come up with the fact that you needed fuel and a spark, you need oxygen... I was watching and the child who has the little egg timer in their hand was madly tapping it because he was bored... And he [Nathaniel] never picked up that the other students were

actually bored with his little science lesson... He was so in his little own world and so apart from the way that they thought at that age."

Data analyses from multiple perspectives indicated that Nathaniel's intellectual development was significantly ahead of his social awareness and relationship-building skills. As with the previous two themes, Figure 4.3 shows the participants' own words and phrases as they emerged from separate data analysis processes, and comprehensively illustrates the multiple perspectives on the theme of 'socially asynchronous development' in Nathaniel.

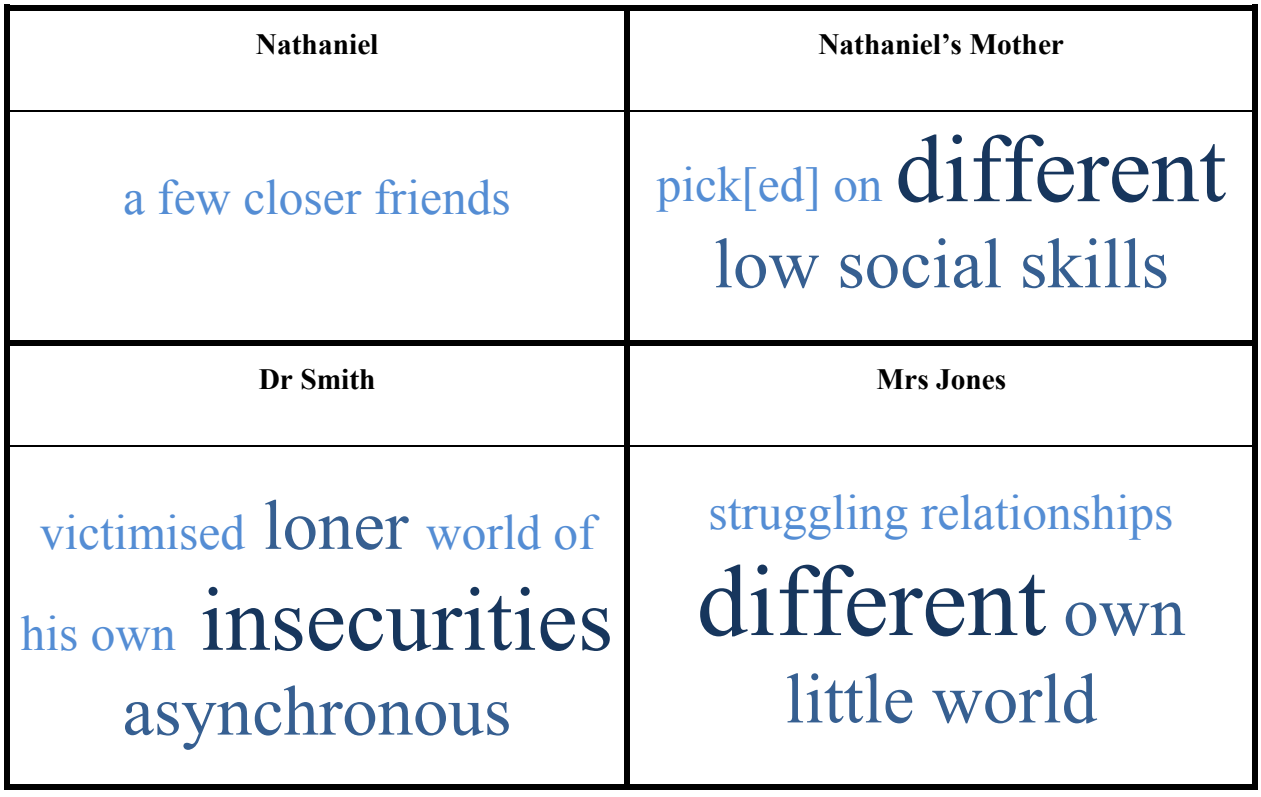


Figure 4.3: Word Cloud: 'Socially Asynchronous Development' (Beginning of Program - Nathaniel)

Findings from the Pre-Test

For the pre-test, Nathaniel had 40 minutes to write a written response to two questions. The first question involved him writing a short story based on a visual or written stimulus. The second question involved him scaffolding the main elements of a story (in dot points) from a visual or written stimulus (see Appendix 5). His writing was analysed against a set criteria (see Appendix 13).

In the 40 minutes allocated to completing the test, Nathaniel wrote two paragraphs in response to the first question, and six very brief dot points in response to question two. His responses were extremely limited, and not the sustained responses expected. Analysis of his responses further corroborated the account of his English teacher, regarding his in-class demonstrated performance in creative writing tasks.

The pre-test was evaluated as showing evidence of Nathaniel's excellent basic writing skills (paragraphing, spelling, punctuation, grammar). However, both responses lacked direction and connection with the character. The co-marker commented that the student had a "mature turn of phrase" and obvious potential, but the work was not a satisfactory demonstration of this potential. This analysis added to the large body of evidence gathered throughout this study that creative writing was an area in which Nathaniel was not achieving according to his potential: he was an underachieving gifted student.

This first section of this chapter has presented findings which partially answer the first research question in relation to Nathaniel: "What is the impact of a Creative Writing Program on this

underachieving gifted student?" The findings presented above illustrate baseline information about Nathaniel at the beginning of the Program. The section that follows provides a comparative set of findings to demonstrate how Nathaniel was different at the end of the Program.

Impact of the Creative Writing Program on Nathaniel

The themes that emerged from multiple data analyses outlined above, in conjunction with the findings from the pre-test, illustrate Nathaniel's demonstrated performance at the time of commencement of the Creative Writing Program. In order to describe the impact of the Creative Writing Program, the same three themes will now be discussed based on a description of Nathaniel at the end of the Creative Writing Program. These end-of-Program descriptions are informed by analyses of interview data from Nathaniel, his mother and his English teacher (referred to as Dr Smith) and the researcher's own observational data from field notes. These data sets were analysed separately, however recurring and overlapping themes regarding the impact of the Program emerged. Following a discussion of these themes are the findings from his post-test.

Negative Feelings Replaced by Self-confidence

In an interview with Nathaniel after the program concluded, the most noticeable difference was the positive phrasing he used. His previous underestimation and feelings of low self esteem, indicated in his pre-intervention interview negative phrasing (such as "can't", "haven't", "I don't know"),

was replaced by positive phrasing: “better at”, “able to” and “do well”. Analyses of Nathaniel’s interview at the end of the Program indicated that he had more confidence in his abilities and heightened self-efficacy, as he acknowledged, “My feelings have changed about what I can do”. Furthermore, when specifically talking about creative writing, Nathaniel defined it as an area he was “better at”, even to the point of identifying English as a subject in which he can “do well”. Previously he had spoken about creative writing as a weakness, and English as an area he was good at only “sometimes”.

Nathaniel did acknowledge that he does not write fast and may have trouble completing a task in a time limit; however, the overall analysis of his interview data signified a trend towards a far more positive self-image than he had conveyed at the beginning of the Program.

An analysis of the interview data from Nathaniel’s mother confirmed this theme, as she claimed the main change she had seen in Nathaniel (as a result of his involvement in the Creative Writing Program) was in regards to his growing self-confidence. Because of this new self-confidence, Nathaniel’s mother has found her son to be more self-motivated in the area of creative writing. She attributes this to acknowledgement of his potential: “Someone recognise [sic.] that he is good in English same as what he is in Science and Math... I think he’s pretty happy about it.” His mother claimed that Nathaniel’s self-motivation, as a result of his developing self-confidence, has carried his other subjects too. His growing confidence, after his involvement in the Creative Writing Program, affected more than just the English classroom.

Data analysis from a post-intervention interview with Nathaniel’s English teacher, Dr Smith, further substantiated the claim that there has been an observable change in Nathaniel’s feelings and

attitudes. Dr Smith termed this change as a significant “break-through”. Dr Smith explicitly spoke of Nathaniel’s change in attitude towards creative writing and has witnessed Nathaniel become more “open to the experience”. Analyses of her interview data consistently indicated that Nathaniel’s confidence has increased, specifically in the area of creative writing. Like Nathaniel’s mother, Dr Smith identified an increased happiness in Nathaniel saying, “He appears to be a happier boy in the English class and this is just great”.

Dr Smith says that Nathaniel is now “aware of his potential in this area and of the possibilities for being an effective writer”, where at the beginning of the Program he was “aware of his limitations” and “doubted his ability”. Most importantly, Nathaniel’s teacher has seen Nathaniel come to “believe in his ability and potential”. Dr Smith attributes these “notable changes” in Nathaniel’s self-confidence and self-image to his involvement in the Creative Writing Program.

The findings which emerged from a cross-analysis of data were further reinforced by analyses of the researcher’s field notes. The researcher witnessed Nathaniel’s enjoyment grow throughout the Program. Nathaniel said to the researcher, “I think if I were given a task I’d do good, or at least better than before”, exhibiting his increased confidence with creative writing. The researcher also noted a more positive attitude towards doing the work, particularly towards the end of the Program where the researcher recorded Nathaniel’s expression that he felt as though he “mastered” creative writing and that, in turn, fed his confidence.

Figure 4.4 shows the words and phrases used by Nathaniel, his mother, his English teacher and the researcher as they emerged from separate data analyses. The figure further illustrates the

corroborating evidence from the multiple perspectives on the theme of 'Negative Feelings Replaced by Self-confidence' in Nathaniel.



Figure 4.4: Word cloud: 'Negative Feelings Replaced by Self-confidence' (End of Program - Nathaniel)

Reversing Underachieving Behaviours

Analysis of interview data from Nathaniel's mother indicated that Nathaniel's growing self-confidence has fed his motivation to do his homework. At the beginning of the Program, data analyses showed that Nathaniel would not hand-in homework because he was not happy with the quality. Analyses of data gathered at the end of the Program revealed that Nathaniel began to show confidence in his work. The researcher's field notes further substantiate this claim, observing that Nathaniel was never late handing in homework for the Creative Writing Program. He often submitted it via email days before it was due. Analysis of the observation data indicates that, at the end of the Program, this behaviour contributing to Nathaniel's underachievement was being reversed as Nathaniel was handing in homework consistently, and to a high standard.

Furthermore, analyses of data gathered from Nathaniel's English teacher show that Nathaniel's actual demonstrated performance with creative writing tasks had increased by the end of the Program. Dr Smith notes that Nathaniel appears to "find it easier to actually start his creative writing tasks" and typically has a stronger sense of direction when writing. Nathaniel himself commented on this, saying he was able to "build better opening paragraph[s] and good complication[s]" in his creative writing, as a result of his involvement in the Program. He no longer wasted class time as he had at the beginning of the Program. Nathaniel acknowledged that he was capable of a "good short story". Dr Smith described Nathaniel as able to "work quite confidently within time constraints" and compared this to his previous difficulties to do so.

Nathaniel's English teacher has observed academic development in the quality of Nathaniel's work, including the quality of his ideas. She has witnessed him explore his own imagination. Dr Smith claims that the Creative Writing Program has facilitated the exploration of Nathaniel's "untapped potential in the area of creative writing". Rather than shying away from the challenge, as he has done in the past, she has seen Nathaniel "more comfortable with the challenges of creative writing". She further verified these comments with Nathaniel's results from his mid-yearly exam, reflecting an upward trend in Nathaniel's demonstrated performance in creative writing tasks since beginning the Program. Before the Program began, his writing was evaluated to be 13.5 out of 20; at the end of the Program he scored 14.7 out of 20. This evidence suggests that the Creative Writing Program has impacted Nathaniel's underachieving behaviours. As a result of his involvement in the Program, Nathaniel's underachievement is being reversed, and Nathaniel is now on his way to achieving his potential.

An analysis of the researcher's observations reveal the impact of the Creative Writing Program on Nathaniel has included transforming his high potential into highly sophisticated demonstrated performance. At the end of the Program Nathaniel's creative writing story (that he composed during the Program) was an exemplary, sustained story of over two pages that showcased clever humour. (This story is discussed further below, in the context of Nathaniel's post-test.)

In summary, Figure 4.5 shows the participants' own words and phrases, on the theme of 'Reversing Underachieving Behaviours', as they emerged from individual data analysis processes. This figure highlights the multiple perspectives that, under rigorous data analysis, appeared to corroborate each other.

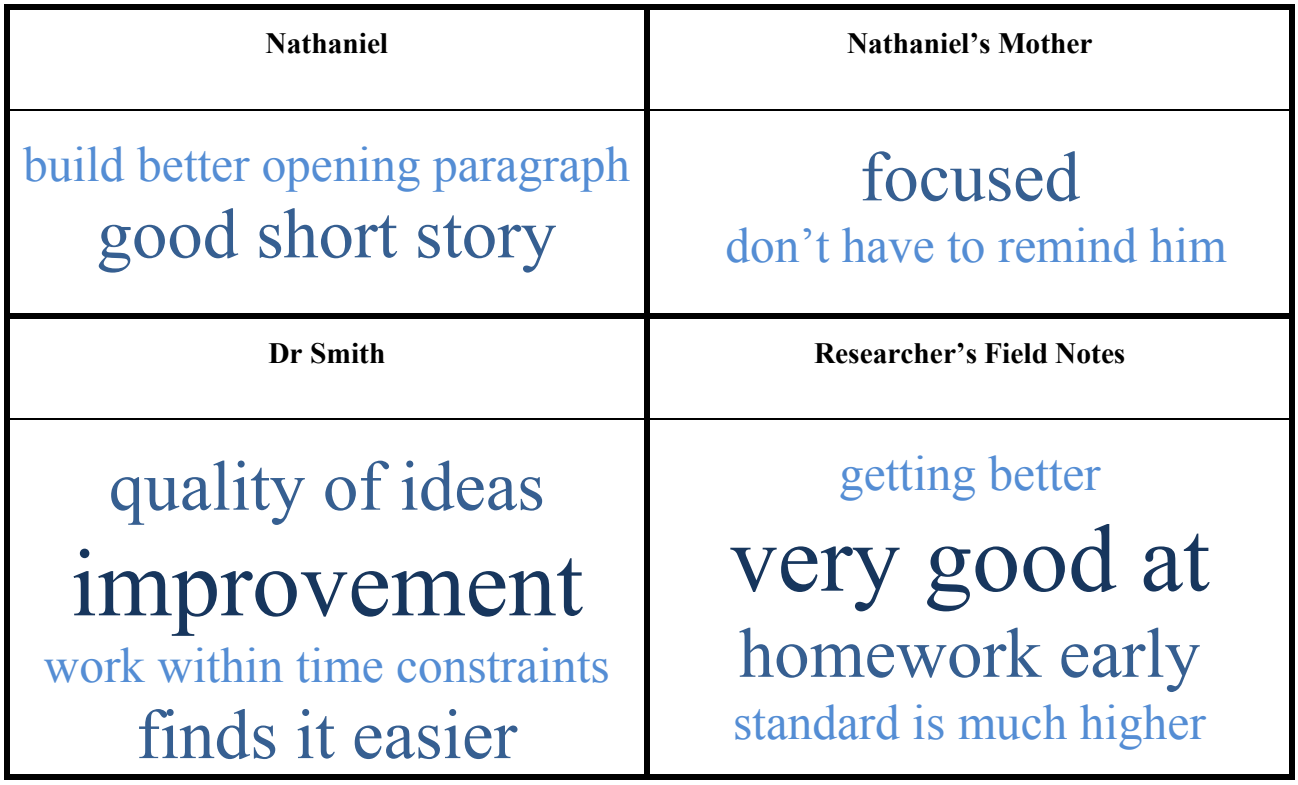


Figure 4.5: Word Cloud: 'Reversing Underachieving Behaviours' (End of Program - Nathaniel)

Trends towards Socially Synchronous Development

For Nathaniel's mother, the most significant impact of the Program on her son was his increased ability to express himself in writing. This was a strong theme that emerged from an analysis of her interview data. She said, "And probably... if he can express himself in writing he would have the skills well [sic.] how to relate it to the normal world, like to other kids. Because he don't [sic.] have that skill to have social conversation with other boys... I think it would help him". Data analysis revealed Nathaniel's mother to believe that the Creative Writing Program had an impact on Nathaniel's social development, and if continued, it could potentially make a positive impact on his ability to develop relationships with his peers.

This contention was validated by Dr Smith. She too has witnessed a development in Nathaniel's social interactions, particularly in the English class. Dr Smith recounted that Nathaniel has been far more confident to take leadership roles in the English classroom, which in her opinion is "out of character" for him. Dr Smith claims he is "more able to engage with group members, rather than being an isolate".

Analysis of Nathaniel's interview data indicated that at the end of the Program he believed he can "do well in English class". However, there is nothing substantial that suggests Nathaniel was explicitly referring to the social aspect of English classes. He did mention missing the company of the other students, finding it "awkward" to be in the Program without his classmates.

Though the researcher did not observe Nathaniel in a social setting, field notes made from the researcher indicate that Nathaniel showed a greater awareness of a social setting within his writing, particularly exemplified through his main character's relationships with two friends. Though this does not conclusively prove that Nathaniel's social development is synchronous with his intellectual development as a result of the Program, it is an interesting finding, indicating trends towards increased social awareness.

Figure 4.6 shows an analysis of multiple perspectives on this theme, 'Trends towards Socially Synchronous Development', as it emerged from the data gathered at the end of the Program. Analysis of Nathaniel's interview data did not reveal any indication that Nathaniel's comments related directly to a social aspect, therefore this field has been left blank. As the researcher had no

opportunity to observe Nathaniel in a social setting, and no data were analysed that yielded this theme, this field has also been left blank.

Nathaniel	**Nathaniel's Mother**
[Theme not evident in data analysis]	skill to have social conversation relate it to the normal world
Dr Smith	**Researcher's Field Notes**
engage with group members leadership role	*[Theme not evident in data analysis]*

Figure 4.6: Word Cloud: 'Trends towards Socially Synchronous Development' (End of Program - Nathaniel)

Findings from the Post-Test

According to the pre-test standards, Nathaniel had 40 minutes to write a written response to two questions. Like the pre-test, the first question involved him writing a short story based on a written or visual stimulus. The second question involved him scaffolding the main elements of a story (in dot points) from a written or visual stimulus (see Appendix 6). The post-test was evaluated by the same set of criteria used to evaluate the pre-test (see Appendix 13).

In the 40 minutes allocated to completing the test, Nathaniel chose to work on his response to one of the two questions, knowing that he required a longer time to think through his ideas. In this time he produced one half-page of text (typed) and one half-page (typed) of dot points. Though his response was shorter than expected for a full narrative response, his response was notably longer than his pre-test response.

Evaluation of the post-test showed the same excellent basic writing skills (paragraphing, spelling, punctuation, grammar) that existed before Nathaniel's participation in the Program. However, Nathaniel's writing exhibited much clearer vision for the latter part of the story, and a demonstrated understanding of the role of the main character in an engaging story. Events were sequenced clearly and logically, and were moving towards an ending that Nathaniel had clearly thought through. His "mature turn of phrase" was evident, as it was in the pre-test. However, the post-test showed more mature vocabulary and punctuation. Most importantly, it is obvious that Nathaniel was aware of the reader of the story as he constructed his narrative. Interestingly, he was able to invoke feelings of empathy for his main character. Empathy, or "positioning himself in another's skin" as his English teacher defined it, was formerly extremely difficult for Nathaniel.

Furthermore, it is worth discussing Nathaniel's work sample from the Creative Writing Program. The story he wrote (without a restricted time limit) in the Creative Writing Program, was two and one-half typed pages in length and was exemplary. His story showcased his vocabulary revealing it to be sophisticated and varied. Nathaniel's story showed awareness and development of minor characters, and a complex sequencing of events. His writing was clearly leading his reader towards an ending.

It was interesting that, through analysis, Nathaniel's main persona appeared to show similarities with his self. The persona was presented as a capable problem-solver, who is clever above all the others in the story. It is possible that his persona within his story could be read as a metaphor for Nathaniel's own struggle with creative writing and his feelings of capability and achievement by the end of the Creative Writing Program. Table 4.1 shows a comparison between Nathaniel's pre- and post-test qualitative evaluations. This table illustrates how that the Creative Writing Program has impacted Nathaniel's writing ability. By the end of the Program Nathaniel was demonstrating a far more sophisticated quality of writing.

Table 4.1: Qualitative Evaluation of Nathaniel's Pre- and Post-test

	Pre-Test	**Post-Test**
Questions Attempted	Chose to work on both of the questions.	Chose to work on one of the two questions.
Length	Two paragraphs for the first question and six very brief dot points for the second question. Short.	Total of one half-page of writing, and one half-page of detailed dot points. Notably longer than pre-test response.
Basic Writing Skills	Excellent paragraphing, punctuation and grammar.	Excellent paragraphing, punctuation and grammar.
Main Character	Character is a bit weak and underdeveloped. Lacking connection with the main character.	Demonstrated understanding of the role of the main character in the story. Able to invoke empathy for the main character. Awareness of more than one character's experiences. Character is well rounded and defined. Shows internal thought of the main character and dialogue. Character bears similarities to Nathaniel.
Conclusion	None.	Much clearer vision for latter part of story. Ending had clearly been thought-out.
Organisation	Lacks direction and no context. Appears to be microcosmic, a miniature scene in a bubble.	Clear and logical sequencing of event. Shows awareness of the big picture and context.
Language Features	Mature turn of phrase. Skilled.	Mature turn of phrase. More mature and varied vocabulary and punctuation.
Other	Potential of this writer is apparent, however the response is limited.	Very aware of the reader in the construction of the story.

Summary of the Impact of the Creative Writing Program on Nathaniel

To conclude, this section of this chapter has presented findings which, when compared to findings from the beginning of the Program, answer the following research question in relation to Nathaniel: "What is the impact of a Creative Writing Program on this underachieving gifted student?" The findings presented above illustrate that the Creative Writing Program has impacted Nathaniel in three ways: negative feelings have been replaced with self-confidence; reversal of underachieving behaviours; and trends towards socially synchronous development. In addition, as a result of his involvement in the Creative Writing Program, Nathaniel's creative writing quality has improved. The section that follows provides a set of findings to indicate the teaching strategies that were successful in facilitating the achievement of Nathaniel's potential.

Teaching Strategies that Suit Nathaniel

Analyses of data gathered from interviews with Nathaniel, his mother and his teachers, and data analyses of the research's own observations are used to answer the second research question:

- What teaching strategies are successful in facilitating the achievement of potential in this underachieving gifted student?

In the context of this study a teaching strategy refers to a method used by a teacher to facilitate a student's learning. The following teaching strategies have emerged as themes from the in-depth analyses of the multiple perspectives of data gathered throughout this study in order to determine

answers to the second research question. The teaching strategies that were found to be successful in facilitating this achievement of potential in Nathaniel, an underachieving gifted student, were: one-to-one teaching, positive teacher identification and differentiation. Each of these strategies are now outlined, as they emerged from analyses of data gathered during the study.

One-to-one Teaching

Analysis of the data consistently indicated that the one-to-one teaching strategy suited Nathaniel, and was successful in providing opportunity for him to achieve his potential. The themes that emerged through the analysis of Nathaniel's interview data revealed that Nathaniel felt the one-to-one teaching environment gave him a better opportunity to achieve his potential because he was "able to concentrate better". However, data analysis also revealed that he had some apprehensions, describing one-to-one as sometimes "awkward" because he was leaving his class. Nonetheless, it is noteworthy that Nathaniel has identified that the one-to-one teaching strategy facilitated an environment in which he could work efficiently.

Similarly, analysis of the interview conducted with Dr Smith at the end of the Program confirmed that Nathaniel has definitely benefited from the one-to-one learning experience and the subsequent support that the Program provided him through that strategy. She affirmed one-to-one as a valuable strategy for underachieving gifted students, like Nathaniel: "Just as lower ability students need one-to-one, I think kids like Nathaniel need one-to-one... where it's almost like a tutoring system where they're withdrawn from class sometimes and given this extension". Dr Smith acknowledged that mainstream classes alone cannot facilitate the achievement of potential in underachieving gifted

students, and further asserts that Nathaniel requires just as much attention as "students at the other end of the ability spectrum". The one-to-one teaching strategy has ensured Nathaniel is given individualised attention and step-by-step assistance in working towards the achievement of his extraordinary potential.

Furthermore, analysis of the researcher's field notes also confirmed this theme. According to analyses conducted on field note data, Nathaniel benefited from the one-to-one attention, and from the safe environment in which he could process his ideas without disruption from his peers. Dr Smith commented at the beginning of the Program that, from her observations, Nathaniel needs "peace to be able to think" and does not like a lot of noise. This was achieved in a one-to-one setting, where work can proceed at the pace set by the student. Although Nathaniel described the one-to-one strategy as sometimes being "awkward" (as mentioned earlier), evidence gleaned through analysis of the researcher's notes suggest this was not a major issue. Conversations with Nathaniel throughout the Program revealed that he was comfortable with the one-to-one setting and was happy participating.

The one-to-one strategy held Nathaniel accountable for some of his underachieving behaviours. His mother mentioned his tendency to avoid something if it appeared to be too difficult. She also indicated that he does not like interruption when he is working and can get easily distracted. The one-to-one strategy employed in the Creative Writing Program addressed these behaviours, and to some degree prevented his underachieving behaviours, through ensuring that Nathaniel had the support, accountability and individualised attention that he required in order to work towards achieving his potential.

Positive Teacher Identification

Analysis of various sets of data gathered during this study indicates that another significant and successful teaching strategy for Nathaniel was positive teacher identification. Positive teacher identification refers to the rapport of a positive relationship between teacher and student. Pursuing positive teacher identification with an underachieving gifted student is a practical way that teachers can encourage student engagement. This theme emerged through the analysis of Mrs Jones' interview data. She articulated that it is important for Nathaniel to know that the teacher recognises that he is smart and that the teacher believes in his ability. For Nathaniel, this is his security. Mrs Jones stated that in regards to Nathaniel, "connection is everything".

This same theme emerged from analyses of interview data with Nathaniel. Although admitting he was good at English only "sometimes", he liked English because his teacher, Dr Smith, is "good at teaching" and "interesting". The implication is that Nathaniel's feelings about a subject can be changed if he identifies positively, or has a positive relationship, with the teacher involved.

Nathaniel's mother confirmed this further when she explained that it has been so valuable for Nathaniel during the Program to have someone other than her and her husband to acknowledge his potential: "Someone from outside the school... encourage him and tell him he have [sic.] the potential and showing him how to develop it and he can have mentors and it's a great thing for him". Nathaniel's mother related this positive relationship with the teacher (researcher) of the Creative Writing Program to his observably growing self-confidence. The recognition of his

potential, by a teacher (researcher), is a strategy crucial to creating an environment in which Nathaniel can achieve his potential.

An analysis of the researcher's own observations further substantiate that positive teacher identification was a successful teaching strategy for facilitating achievement of potential in Nathaniel, an underachieving gifted student. By the end of the Program the researcher had built rapport with Nathaniel, and he was far less shy and reserved and notably more willing to actively participate. As Mrs Jones had said, as soon as Nathaniel knew the researcher believed in him and his abilities, Nathaniel became more engaged in the lessons. Throughout the Program, the researcher asked Nathaniel what he enjoyed about the Program and he replied that he thought the researcher was funny, indicating that he felt a positive identification with the researcher. It is a significant finding that relationships are very important in successfully remediating underachievement in this gifted student.

Dr Smith stated, from her experience, many teachers do not believe that gifted students require support. According to Dr Smith, this attitude in teachers does not promote a positive relationship with the student, and will not aid the teacher in effectively meeting the learning needs of underachieving gifted students. The finding that teachers' attitudes are often negative towards gifted students, particularly underachieving gifted students, is interesting as the findings identified in this study have illustrated the significant role of the teacher in helping an underachieving gifted student achieve according to their potential.

Differentiation

The final learning strategy that emerged from analysis of the data was the necessity of individual differentiation to meet Nathaniel's learning needs. Analysis of Dr Smith interview data substantiated this theme. She asserted that Nathaniel needs a differentiated challenge: he needs something that will extend him and challenge him "at the level that he needs to be challenged at". The challenge needs to be achievable in Nathaniel's eyes, but not easy. Nathaniel has commented that he does not like work that is "too easy", as he finds it "boring". It is important to make the distinction: Nathaniel does not require more of the same work other students are doing or he will switch off. This differentiation, shown to be successful in the Creative Writing Program, is a key to successful engaging Nathaniel in his learning and consequently helping him achieve his potential.

The researcher recognised Nathaniel as a very literal thinker, which was confirmed by Dr Smith. He is comfortable in the world of mathematics and science. Based on his observable mathematical/logical learning style, the researcher used the lens of a formula as a frame-of-reference when explaining how to construct a good narrative. Engaging his learning style, and differentiating instruction and tasks in this way, ensured Nathaniel was in the best position to achieve his potential.

Time limits are always going to discriminate against Nathaniel. Nathaniel acknowledged that he struggles with short time limits. Although there has been some development in this area as a result of participation in the Creative Writing Program, Nathaniel does require time to flesh out his ideas and work through his responses. As Dr Smith said, "When you're a profound thinker, you do need time to be profound". Task differentiation can accommodate for this so as not to "squelch the

thinker in him", as Dr Smith said. At the same time, differentiation provided opportunity for Nathaniel to continually work on time management skills. From the researcher's experience, this kind of differentiation in task timelines has been found to be an effective and successful learning strategy for Nathaniel.

Summary of Nathaniel

Analyses of multiple sets of data have found that the researcher's Creative Writing Program has impacted Nathaniel in the following ways:

- A marked change concerning his negative feelings shown in an observable shift towards greater self-confidence.
- A reversal of some underachieving behaviours, including homework and lack of motivation, and a general trend towards improvement in the area of creative writing.
- A trend towards better social interaction and group involvement as a result of increased self-confidence.

Also, as a result of analyses of multiple sets of data, the teaching strategies that have been identified to be successful with Nathaniel include:

- one-to-one teaching;
- positive teacher identification; and
- differentiation.

Figure 4.7 is a visual representation of the synthesis of the findings on Nathaniel, as a result of data analysis. It represents the teaching strategies as cogs or gears that work together to impact on the themes that emerged from data analysis at the beginning of the Program: negative feelings, underachieving behaviours, and socially asynchronous development. These teaching strategies combined made the most impact on Nathaniel's negative feelings and underachieving behaviours, and began to make an impact upon his socially asynchronous development.

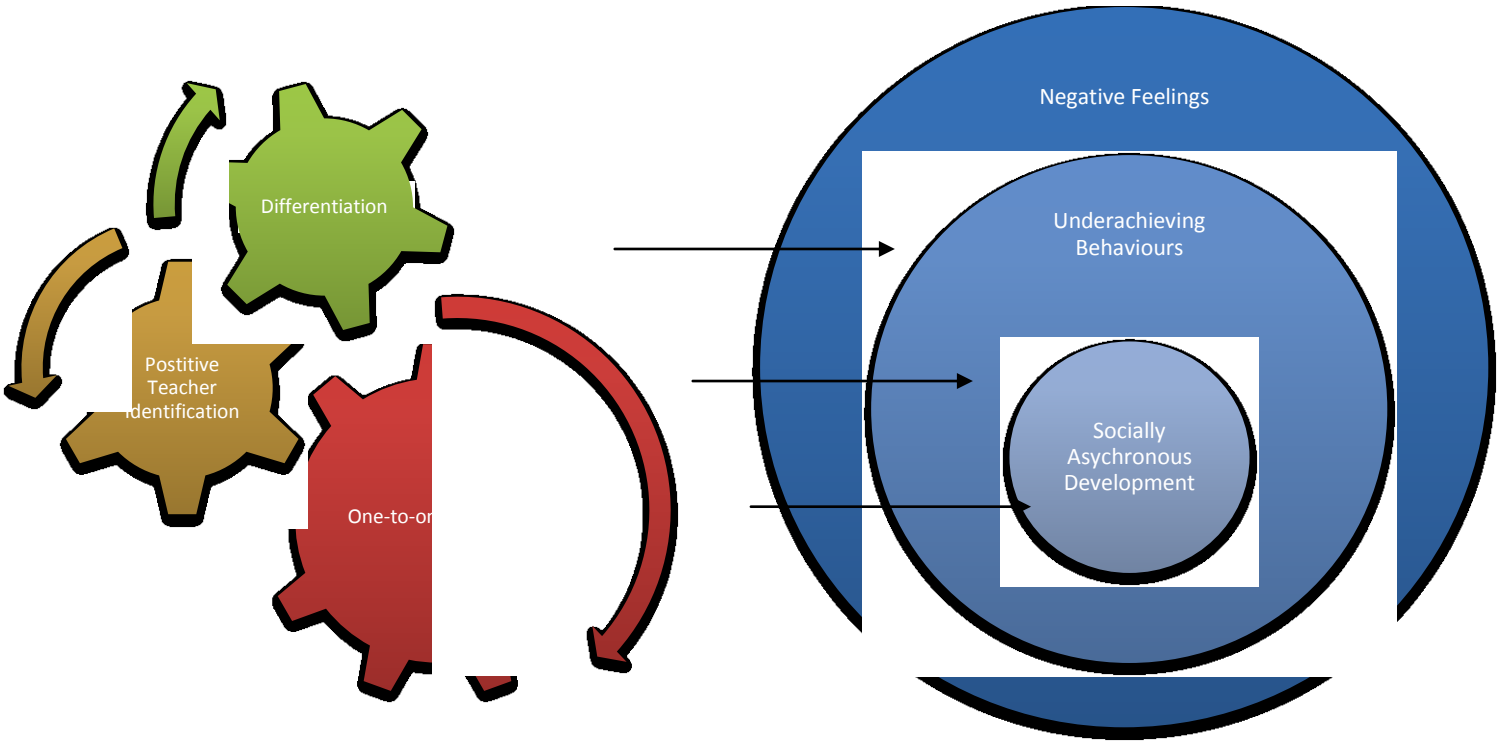


Figure 4.7: Synthesis of Data Analysis Findings on Nathaniel

Link to the Next Chapter

This chapter has provided the findings from the first case study on Nathaniel in order to answer the two research questions in terms of Nathaniel. Using the same structure, the next chapter (Chapter 5) will consider the findings from the second case study on Luke, in order to answer the research questions in terms of Luke. In Chapter 6 – Discussion and Recommendations, the findings from both of these case studies will be analysed in the context of the literature on this topic.

CHAPTER 5: FINDINGS FROM CASE STUDY 2 - LUKE

This chapter will describe the findings that emerged from in-depth analyses of the multiple sources of data gathered during the first case study with Luke. By doing so this chapter will provide evidence to answer the following research questions:

- What is the impact of a Creative Writing Program on this underachieving gifted student?
- What teaching strategies are successful in facilitating the achievement of potential in this underachieving gifted student?

In order to answer the first research question, regarding the impact of the Creative Writing Program, Luke is described at the beginning and end of his involvement in the Creative Writing Program. The purpose of these two descriptions is to clearly identify the influence the Program has had on the participant and thus answer the first research question. These descriptions have been informed by analyses of the following data gathered to provide a comprehensive picture of the impact of the Creative Writing Program:

- a pre- and post-intervention interview with Luke;
- a pre- and post-intervention interview with Luke's father;
- an interview with Luke's mother;
- a pre- and post-intervention interview with Luke's English teacher (who will be referred to as Dr Smith);
- an interview with another of Luke's teachers (who will be referred to as Mrs Jones);
- a qualitatively assessed pre- and post-test; and
- observations from the researcher's field notes.

To answer the second research question, this chapter also documents the successful teaching strategies that facilitated the achievement of potential for the underachieving gifted participant, Luke. Themes have been gleaned from the aforementioned interview data and the researcher's own observations. The practical strategies that resulted from comprehensive data analyses may provide ideas for future teachers dealing with similar underachieving gifted students.

As it is not the intention of this study to compare the characteristics of the two participants or their response to the Program, the findings from the two independent case studies will be dealt with in two separate chapters. Consequently, the research questions have been answered in terms of Nathaniel, the first case study, in Chapter 4. The research questions will also be answered in terms of Luke, the second case study in this chapter (Chapter 5). Nevertheless, findings from both studies will be considered side-by-side in the Discussion and Recommendations (Chapter 6) in order to draw commonalities that may help future teachers in their interactions with underachieving gifted students.

Overview of Luke and his Involvement in the Creative Writing Program

Luke is a 13 year-old boy in Year 7. Luke has not been formally psychometrically tested. However, as detailed in the Methodology chapter (Chapter 3), Luke's results from his school-based standardised tests and evidence from both of the teachers involved in this study indicate that Luke is gifted. However, evidence also suggests that Luke's potential is inconsistently demonstrated

especially in class tasks. This contention was supported by anecdotal evidence from his teachers who confirmed that Luke is an underachieving gifted student.

Luke's participation in the Creative Writing Program involved six sessions of approximately 50 minutes, over a period of seven weeks. Throughout the program, Luke was guided through a series of creative writing tasks, eventually writing his own short story.

Luke at the Beginning of the Program

To establish Luke's abilities and behaviour at the beginning of the Program, Luke, his father, his mother, his English teacher (referred to as Dr Smith), and another of Luke's teachers (referred to as Mrs Jones) were interviewed before the commencement of the Program. These sets of data have been analysed separately, however recurring themes became apparent. These two themes, 'negative feelings and insecurities' and 'underachieving behaviours' are discussed based on the analysis from the multiple perspectives of the interviewees. Following these themes are the findings based on analysis of his pre-test results.

Negative Feelings and Insecurities

Data analysis of an interview with Luke revealed that he had some negative attitudes about school. He was able to identify some subjects that he liked, such as History and English. However, he

described school as “dull” and “boring”. There were notable occasions, within the interview, where he downplayed his abilities. He did not believe he had any outstanding achievements, although he has been identified as being gifted by his teachers. He described himself as “strange”, which does not necessarily indicate a conclusive negative self-image, but does give some interesting insight into his self-perception.

This theme of negative feelings and insecurities was further elaborated on in an interview with Mrs Jones. She remarked that she believed Luke’s self-perception is “probably not as positive as it needs to be”, and that he shows signs of a low self-esteem and lacks confidence. Mrs Jones posed that this could relate to the feeling of not measuring up to his older brother. She believes that Luke does not enjoy school, because “his interest areas lie well outside of the school context”. Dr Smith, Luke’s English teacher, further added to this, describing Luke as “insecure” and noted that Luke often underestimates himself.

When comparing analyses of the two teachers’ interview data, it became apparent that Dr Smith disagreed with Mrs Jones and instead asserted that Luke had an overall positive attitude towards learning, particularly in the English classroom. However, she did acknowledge a challenging attitude within Luke; an attitude that opposes the structures and protocols of school. She explained, “I think he enjoys learning, but I don’t think he’s mature enough yet to understand the value of learning”.

This theme was further affirmed in the analyses of interview data from both of Luke’s parents. Luke’s father stated that Luke is happy to go to school, but does not really enjoy it. Luke’s mother confirmed this saying, “I don’t know if I could even think about anything that he’s particularly

positive about at school". According to his parents, Luke's comments about school are negative. Luke's father confirmed that Luke does not find the structures easy, while his mother commented that Luke's interests are not fulfilled at school. Analysis of both parents' interview showed an acknowledgement of the role of Luke's older brother as Luke's standard for success. Both parents indicated that Luke did not always meet this high standard. Luke's mother explicitly mentioned Luke's low self-esteem that has stemmed from his perception that he does not achieve as well as his older brother.

Figure 5.1 represents the theme of Luke's 'Negative Attitudes and Insecurities' as it emerged from the data at the *in vivo* stage of coding. The interviewee's own words and phrases have been represented as a word cloud, substantiating that this is a key theme that has emerged from the analysis that was conducted on data gathered from each interview.



Figure 5.1: Word Cloud: 'Negative Attitudes and Insecurities' (Beginning of Program - Luke)

Underachieving Behaviours

It is completely unanimous, through data analysis, that Luke's key area of giftedness is his creativity. All analyses of all data sources verified this. Both Mrs Jones and Dr Smith used the term "gifted" to describe Luke. Mrs Jones explained that Luke is "capable of exceptional work", including "excellent structure and vocab" and "higher order thinking". Dr Smith substantiated this, describing Luke to have "potential that is well above [his] cohort". She typically used phrases such as "very quick" and "so bright" to describe Luke. Similar themes emerged through the analysis of

data gathered from interviews with Luke's parents. His mother described Luke as having a brilliant mind and amazing recall for interest-based knowledge. Luke's father mentioned that Luke has read a number of Shakespeare plays for interest sake, though the rest of his cohort would not study Shakespeare for another two years. All sources substantiate the claim that Luke has significant potential.

However, all sources of data indicated that Luke displays behaviours that contribute to underachievement. Both of his teachers acknowledged that Luke does not always achieve according to this high potential. Mrs Jones said that sometimes Luke's demonstrated performance would be "exceptional", other times "very average". Dr Smith described Luke to be "superficial", "careless" and "intellectually lazy". She explained that he only likes to do the bare minimum, and does not try to extend himself or show-off what he knows. Though he has exceptional potential, his careless behaviours obstruct the achievement of this potential.

Luke's inconsistent behaviours seem to be part of the cause of his underachievement. Data analysis revealed this to be a strong theme through the data gathered from Luke's mother. Luke's mother described Luke to be "not predictable" and "changeable". She qualified this explaining that Luke is "completely inconsistent": though he is "very bright" he would "race through [work] as fast as he could". He does not appear to care that he is not doing his best or showing off his knowledge. She described his work as being of "reasonable standard", "bare minimum" and "no effort". Luke's mother shared an anecdote about signing Luke up for writing competitions: one year he won a high distinction, and "after that he was just dismal" and "he'd just get the lowest thing", illustrating his inconsistency in demonstrated performance. It is clear that this inconsistent behaviour is a contributing factor to Luke's underachievement.

Analysis of Luke's interview data showed that Luke recognised that he was not achieving his potential consistently. He admitted, "I could do a bit better". Luke further expressed that he does not always put his best effort into his work, only the work that he finds interesting. Similarly, he only "sometimes" completes homework, avoiding the homework for the subjects he does not like, such as Mathematics.

Adding to the findings from analyses of data gathered, both Luke's father and mother separately confirmed that Luke does not bring homework home, and tries to hide it from both his parents. Luke's father indicated that Luke's reports typically read, "Student with potential; doesn't always achieve it, needs to work on his homework and writing skills". This same theme was evident in the interview with Mrs Jones, who noted that Luke did not show motivation to hand in homework and this behaviour contributes to his underachievement. Interestingly, Dr Smith claimed Luke does hand in homework on time. However, from her observation, Luke's homework is not always completed to the fullness of his potential.

Figure 5.2 is a word cloud representing the theme 'Underachieving Behaviours' that emerged from data analysis. The words and phrases used are the participant's own, and are representative of the *in vivo* stage of coding. Some words in this figure represent Luke's high potential, and are contrasted against words that describe his underachieving behaviours and show Luke to be an underachieving gifted student.



Figure 5.2: Word Cloud: 'Underachieving Behaviours' (Beginning of Program - Luke)

Findings from the Pre-Test

For the pre-test, Luke had 40 minutes to write a written response to two questions. The first question involved him writing a short story based on a visual or written stimulus. The second question involved him scaffolding the main elements of a story (in dot points) from a visual or written stimulus (see Appendix 5). His writing was analysed against a set criteria (see Appendix 13).

In the 40 minutes allocated to completing the test, Luke wrote three quarters of a page (four paragraphs) for his short story. For the second question he wrote 13 brief dot points, listing the key events in the story. His responses were reasonable, considering the time limit. However, he did not use all the time available to him in the pre-test, finishing early.

When the pre-test was analysed, findings from the evaluation process showed evidence of Luke's reasonable, yet rushed, basic writing skills. Paragraphing was present, but could have been used better to organise the story. Punctuation was applied intermittently and haphazardly. There were a number of long sentences that need re-working. The story could have could have been far more descriptive. Furthermore, at times the tone seemed almost conversational, rather than a narrative. When analysed thematically, Luke's story was quite dark dealing with fear and isolation through a character on the fringes. The main character was somewhat superficial and undeveloped. Luke did show the foresight of an ending: the story ends climactically, but perhaps too quickly.

These pieces of writing, produced during the pre-test, showed definite potential in the area of creative writing, particularly in Luke's ability to generate imaginative ideas. However, an analysis

of his qualitative pre-test results also showed Luke's demonstrated performance to be careless and superficial, with his lack of editing and punctuation, limited character development, and rushed ending. This evaluation added to the body of evidence that illustrated creative writing was an area in which Luke was not achieving according to his potential: he was an underachieving gifted student.

This first section of this chapter has presented findings which partially answer the first research question in relation to Luke: "What is the impact of a Creative Writing Program on this underachieving gifted student?" The findings presented above illustrate baseline information about Luke at the beginning of the Program. The section that follows provides a comparative set of findings to demonstrate how Luke was different at the end of the Program.

Impact of the Creative Writing Program on Luke

The themes that have emerged from data analysis and findings from the pre-test illustrate Luke's demonstrated performance at the time of commencement of the Creative Writing Program. In order to describe the impact of the Creative Writing Program, the same two themes will be discussed based on a description of Luke at the end of the Creative Writing Program. These end-of-Program descriptions are informed by analyses of interviews with Luke, his father, his mother and his English teacher (referred to as Dr Smith) and the researcher's own observational data from field notes. These data sets were analysed separately, however recurring themes regarding the impact of the Program emerged. Following a discussion of these themes are the findings from his post-test.

Negative Feelings Replaced by Self-confidence

Analysis of Luke's interview data at the end of the Program indicated a very positive self-perception and positive attitude towards school work, particularly creative writing. Where Luke has described himself as "strange" in an interview at the beginning of the Program, he defined himself as "happy" at the end of the Program. Data analysis further foregrounded the repetition of the phrase "can do", with Luke stating, "I can do more than what I think I can do". He explicitly admitted that involvement in the Program has made him "put a much better attitude towards school and learning".

This theme was further substantiated through the analysis of an interview with Luke's mother. She claimed the Program "boosted his confidence". The term "special" appeared to repeatedly emerge through the systematic data analysis processes. In the context of this situation, the term "special" implied recognition for above average performance, rather than the use of the term "special" to indicate the need for additional assistance due to perceived learning difficulties. Luke's mother identified that the Program "made him [Luke] feel special" and "he [Luke] thought he was pretty special" for being chosen to participate. She claimed he was so excited that he showed a behaviour that "is completely out of character" for him: he would come home and report something positive about school, or specifically what was happening in the Program. The impact of the Creative Writing Program on Luke was so significant in her eyes that Luke's mother asked the researcher if the Program could continue.

An analysis of data gathered during an interview with Luke's father further confirmed this theme. He identified the main effects on Luke were in regards to: his general self-confidence; increased confidence in the subject area; and an improved attitude about going to school. Luke's father said, "... this is the first time in a long time he looked forward to going to school". The increase in self-confidence is a significant theme, as data analysis revealed this was a recurring term used by Luke's father. Luke's father indicated that Luke was proud of himself. This is significant as Luke's father stated that Luke had never before said that he was proud of himself.

The recurring theme that emerged through in-depth analysis of Dr Smith's interview data was regarding the positive impact the Creative Writing Program had made on Luke's self-esteem. Due to participation in the case study, Dr Smith described Luke as feeling "valued". Because of this, his already positive attitude has been reinforced. Data analysis revealed that Dr Smith related an increased demonstration of pride in his work to Luke's growing self-esteem. The terms 'self-confidence' and 'positive sense of self worth' also repeatedly emerged from data analysis of Dr Smith's interview. She identified that Luke's increased self-confidence, self-esteem and feelings of self-worth have made him "a very happy boy". Analysis of Dr Smith's interview data unequivocally indicates that the Creative Writing Program has impacted Luke's previous negative feelings and insecurities, and given him a more positive self-perception.

Evidence for this theme also emerged through analysis of the researcher's field notes, and indicated that involvement in the Program seemed to increase Luke's confidence. Analyses of the researcher's notes reveal that Luke's attitude towards learning during the Creative Writing Program was consistently positive. Luke often made comments, recorded in the researcher's notes, signifying his enjoyment and positive attitude towards the Creative Writing Program. The word

‘positive’ emerged frequently through analyses of these data. This is a significant contrast to the data analysed from the beginning of the Program, where Luke’s negativity was foregrounded.

Figure 5.3 is a word cloud of the words and phrases that emerged from the separate analyses of the sets of data gathered about Luke at the end of the Program. These analyses indicated that the theme ‘Negative Feelings Replaced by Self-confidence’ was a significant theme corroborated by multiple perspectives.



Figure 5.3: Word Cloud: 'Negative Feelings Replaced by Self-confidence (End of Program - Luke)

Reversal of Some Underachieving Behaviours

Analyses of data gathered from Luke's English teacher showed that Luke's actual demonstrated performance with creative writing tasks has increased due to a reversal of some of his underachieving behaviours. Dr Smith noted that Luke now "takes more pride in what he does", whereas previously he was more careless. Analysis of Luke's interview data confirmed that he recognised that more effort yielded a better creative writing piece. His tendency to think superficially has been challenged also, according to Dr Smith, who has witnessed Luke "think more deeply, rather than... impulsively". Data analyses showed that Dr Smith believed Luke to be a better writer as a result of involvement in the Creative Writing Program as some of the behaviours that have led to his underachievement (such as his carelessness) had been addressed and reversed by the Program. Luke's newfound ability to show more care with his work was a recurrent theme that emerged through analyses of Dr Smith's interview data.

Dr Smith has observed academic development in the quality of Luke's work, claiming he is "closer to achieving his potential in this area". She further verified these comments with Luke's marks from his mid-year exam, reflecting an upward trend in his demonstrated performance in creative writing tasks since beginning the Program. Before the Program began, his writing was evaluated to be 16 out of 20; at the end of the Program he scored 18.7 out of 20. Comparing these marks suggest that Luke's underachievement is being reversed and that he is closer to achieving his potential, as a result of his involvement in the Creative Writing Program.

Analyses of the researcher's observations reveal that the Creative Writing Program has enabled Luke to develop his potential into demonstrated performance. It became obvious through data

analysis of the researcher's field notes that Luke had developed the skills of self editing. At the end of the Program, the researcher noted that: "Luke showed evidence of re-reading and editing his work, which is something I didn't see last time... He would stop and re-read his work, and then start typing again". Luke himself admitted that he had better focus as a result of involvement in the Program. At the end of the Program Luke's creative writing story (that he composed during the Program) was a good example of his capabilities. Though not finished due to interrupted schedules, the story showed care and thought regarding character construction and other technical aspects that had been previously absent in his writing. (This story is discussed further below, in the context of Luke's post-test.)

Analyses of the researcher's notes indicate that there was no significant impact, as a result of his participation in the Creative Writing Program, on Luke's motivation to submit homework. According to findings of the data analyses, there were several instances in which "excuses" were made by Luke for the fact that homework set by the researcher was not completed. However, analyses of data from Luke's mother conversely indicated that Luke was entirely self-motivated to do any work that was set for him in the Program. His mother said, "he was excited and I didn't even see it, it was done already", whereas usually he tried to hide homework. To further corroborate this, it is noteworthy that analyses of the researcher's notes did reveal one instance where Luke showed personal initiative to work on his creative writing story at home even though he believed that his involvement in the Creative Writing Program was finished.

Analyses of interviews with Luke's father and mother did not yield any significant evidence to substantiate or contest this theme. Neither parent commented on the reversal of underachieving

behaviours in Luke although Luke's father commented that he observed Luke show an increased confidence in writing.

In summary, Figure 5.4 shows the participants' own words and phrases, on the theme of 'Reversal of Some Underachieving Behaviours', as they emerged from analysis of the sets of data gathered at the end of the Program.

Luke	Luke's Father and Mother
can do much better if I tried harder focused	*[Theme not evident in data analysis]*
Dr Smith	**Researcher's Notes**
takes pride think more deeply closer to achieving his potential	re-reading better focused editing excuses

Figure 5.4: Word Cloud: 'Reversal of Some Underachieving Behaviours' (End of Program - Luke)

Findings from the Post-Test

According to the pre-test standards, Luke had 40 minutes to complete the post-test composed of two questions. Like the pre-test, the first question involved him writing a short story based on a written or visual stimulus. The second question involved him scaffolding the main elements of a story (in dot points) from a written or visual stimulus (see Appendix 6). The post-test was evaluated by the same set of criteria used to evaluate the pre-test (see Appendix 13).

In the 40 minutes, Luke chose to attempt both of the questions. To answer the first question, he wrote approximately one page (typed) of text, composed of seven paragraphs. For the second question he wrote 11 descriptive dot points. His extended response to the post-test was notably longer than his pre-test response. Luke's dot-pointed response, answering the second question, was far more descriptive than his pre-test response and gave more depth to the main character. Unlike the pre-test where he finished quite early, Luke used more of the time available to him.

An analysis of Luke's post-test showed far more sophisticated description and language than he had demonstrated in the pre-test, showcasing a broader vocabulary. His use of paragraphing was thought to be more mature than his pre-test and thus, the story read better. Better and more consistent punctuation was evident also. There were no carelessly long sentences, as there had been in the pre-test. It is important to note that where Luke had been careless with editing in the pre-test, his post-test responses showed more consistent effort. Considering this is an area his teachers and mother identified as problematic for Luke, his development in this area is significant.

The story Luke wrote for the post-test showed a greater awareness of the 'big picture', broader context and back story, especially in regard to the development of the main character. As in the pre-test, thematically Luke's story was quite dark, with a character on the outer. It is interesting to note that this perception of the persona on the outer, correlates with data analysed from Luke's first interview in which he described himself as "strange". However, both of Luke's post-test responses included a hopeful ending, unlike his pre-test responses. Similar to the pre-test, Luke did show the foresight of an ending in both responses. Table 5.1 shows a comparison between Luke's pre- and post-test qualitative evaluations. This table demonstrates how the Creative Writing Program has

impacted Luke's writing ability. By the end of the Creative Writing Program Luke was demonstrating a far better writing quality that he had been at the beginning.

Luke's work samples from the Creative Writing Program showed a better exploration of main characters, resulting in more believable and vivid personas. Luke developed more meaningful punctuation in order to carry the reader along into his story, and worked on better description of the setting to captivate his audience. Though he did not complete this story for the Creative Writing Program due to a number of absences, he did show improvement in areas in which he had previously struggled.

Table 5.1: Qualitative Evaluation of Luke's Pre- and Post-test

	Pre-Test	**Post-Test**
Questions Attempted	Chose to work on both of the questions.	Chose to work on both of the questions.
Length	Four paragraphs (approximately three quarters of a page) for the extended response. 13 brief dot points. Finished these tasks early.	Seven paragraphs (approximately one page in length) for the extended response. 11 descriptive dot points. More sustained, developed text. Used more of the time available to him.
Basic Writing Skills	Reasonable basic writing skills. Paragraphing was present, but could have been used better to organise and move along the story. Punctuation was applied haphazardly, with a number of long sentences that needed punctuation.	More mature use of paragraphing and punctuation. No carelessly long sentences. More consistent effort with editing was evident.
Main Character	Character on the fringes. No developed secondary characters. Main character was undeveloped.	Character on the fringes. Main character developed, with a satisfactory back story to support the narrative.
Conclusion	Showed forethought of an ending. Climactic ending. Ending was a little rushed.	Showed forethought of an ending. Unexpected hopeful ending.
Organisation	Good sequence of events and basic paragraphing skills to support the flow of the narrative.	Shows better awareness of big picture, broader context and back story. Better flow, due to better paragraphing.
Language Features	Needed to be far more descriptive. Needs to show the details through action, rather than tell through character reflection. Thematically, quite dark. At times seems almost conversational, rather than a narrative.	More sophisticated language and description. Broader vocabulary in use. Thematically, quite dark. Use of third person.
Other	Potential of this writer is apparent; however the response is careless and superficial and requires more disciplined writing.	This story seemed to be fragment from a bigger story, not necessarily a stand-alone short story.

Summary of the Impact of the Creative Writing Program on Luke

To conclude, this section of this chapter has presented findings which, when compared to findings from the beginning of the Program, answer the following research question in relation to Luke: "What is the impact of a Creative Writing Program on this underachieving gifted student?" The findings presented above illustrate that the Creative Writing Program has impacted Luke in two main ways: negative feelings have been replaced with self-confidence; and some of his underachieving behaviours have been reversed. In addition, as a result of his involvement in the Creative Writing Program, Luke's creative writing quality has improved. The section that follows provides a set of findings to indicate the teaching strategies that were successful in facilitating the achievement of Luke's potential.

Teaching Strategies that Suit Luke

Data from interviews with Luke, his parents and his teachers, and data from the research's own observations are used to answer the second research question:

- What teaching strategies are successful in facilitating the achievement of potential in this underachieving gifted student?

In the context of this study a teaching strategy refers to a method used by a teacher to facilitate a student's learning. The following teaching strategies have emerged as themes from the in-depth analyses of the multiple perspectives of data gathered throughout this study in order to determine

answers to the second research question. The teaching strategies that were found to be successful in facilitating this achievement of potential in Luke, an underachieving gifted student, were: one-to-one teaching and interest-based differentiation. Each of these strategies are outlined, as they emerged from analyses of data gathered during the study.

One-to-one Teaching

Based on the analyses of multiple sets of data, the most consistently evident theme was that one-to-one teaching would benefit Luke. Analyses of Dr Smith's interview data indicated that Luke requires one-to-one attention. She describes this to be one of the most successful strategies used in the Creative Writing Program to impact Luke's underachievement. She claims this strategy has helped him to become "better organised" and be "held... accountable". He needs individualised attention, and that is what one-to-one teaching can provide that a large class environment cannot. The one-to-one has provided Luke the opportunity to have a "voice" in a more "personal context", according to Dr Smith, and it is this that has made a positive impact on his self-confidence.

Analyses of Luke's interview data indicated that he enjoyed the one-to-one teaching style, reporting that it eliminated distractions for him. This theme was substantiated through the analyses of the data gathered from Luke's mother. She explained that Luke enjoyed the Program "because it was just him". Luke's mother related the one-to-one strategy to the direct impact the Program made on Luke's negative feelings. She claimed that because he was singled out he felt special and it boosted his confidence. It is because of this confidence boost, provided in the one-to-one teaching strategy, that Luke is closer to achieving his potential.

Analyses conducted on the data gathered through the researcher's field notes further corroborate that one-to-one teaching was a successful teaching strategy for Luke. The researcher noted that Luke adapted very quickly to the one-to-one learning environment. From analysis of the researcher's observations, the one-to-one strategy seemed to be successful because Luke was able to ask for help without fear of his peers overhearing. The individualised and undivided attention he received, as a result of the one-to-one strategy, specifically targeted ways he could work towards achieving his potential. Also, as Dr Smith suggested, the one-to-one strategy prevented Luke from cutting corners. Analysis of Mrs Jone's data corroborated this, as she stated "Luke needs really careful monitoring in order to achieve". The one-to-one strategy held Luke more accountable for his work, and thus he learned to put in a more consistent effort, and consequently began achieving his potential.

Interest-based Differentiation

Analyses of the multiple data sets revealed this thread of commonality: Luke is most receptive to learning when it is interest-based. Luke's interview revealed, through comprehensive analysis processes, that Luke consistently related interest to motivation. He stated that he puts effort into assignments that he finds interesting and does not complete Mathematics homework because he does not find it interesting.

This same theme emerged through the analyses conducted on interview data with Luke's father and mother. Luke's father explicitly stated, "If he's not interested in it, he tends to try to get out of it as quick as he can". Luke's mother said something similar when she described Luke to be "very unmotivated, unless it's in areas that he really is excited about". It became very apparent through analysis that Luke does not put effort into things that do not interest him.

Luke's father further related interest to achievement, as he explained that Luke achieves in cooking class because he is interested in cooking. In order to achieve his potential, Luke requires what his father terms as "individuality within his education". Luke's interests must be engaged often through differentiation. His mother stated that he needs "individualised" learning, because "anything he's interested in he would achieve very high in". Analysis of Dr Smith's data corroborated this. A typical quote from her indicated that when Luke is interested, his achievement is "absolutely phenomenal". Differentiation, especially interest-based differentiation, is a teaching strategy that proves successful in facilitating the achievement of Luke's potential.

Luke's interests, from analyses conducted on all the data sets, include: computers, cooking, hands-on learning experiences, social interaction and creativity. Mrs Jones said Luke needs "outside the box" educational experiences. Analysis of Mrs Jones and Dr Smith's data further substantiated that for Luke interest drives achievement. Dr Smith said Luke is "motivated by things that will enjoy him and make him feel good about himself". To ensure Luke had the opportunity to achieve his potential the researcher used interest-based strategies to hook him into lessons. The researcher gave Luke the opportunity to blog his responses to creative writing tasks and engaged him in his preferred genre of fiction.

Analysis of multiple data sets has revealed that responsive teaching strategies, such as engaging interests through differentiated tasks, is effective for Luke. Mrs Jones suggests that interest equates to engagement for Luke. Dr Smith states that the reason the Creative Writing Program was successful for Luke is because he felt like he had a "voice" and his interests were listened to and integrated through differentiation.

This theme was further corroborated by the analyses of the researcher's observations. Field notes consistently indicated that Luke was completely engaged and motivated when he was interested in a topic. The researcher noted that Luke appeared to be "so focused he would almost forget to breathe". His concentration would not break. When this data was compared with other data gathered during the study that revealed Luke to be distractible or unmotivated it became clear that engaging Luke's interests is key to facilitating the achievement of his potential. The researcher, in another observation, noted that Luke was entirely intrinsically motivated and engaged by the content. It is clear that engaging Luke's interests through differentiation was a successful learning strategy for Luke that was found through the Creative Writing Program.

Summary of Luke

Analyses of multiple sets of data have found that the Creative Writing Program has impacted Luke in the following ways:

- A marked change concerning his negative feelings shown in an observable shift towards greater self-confidence, positive attitude towards learning, and feelings of self-worth.
- A reversal of some of his underachieving behaviours, including carelessness, and a general trend towards improvement in the area of creative writing.

Also, as a result of analyses of multiple sets of data, the teaching strategies that have been identified to be successful with Luke include:

- one-to-one teaching; and
- interest-based differentiation.

Figure 5.5 is a visual representation of the synthesis of the findings on Luke, as a result of data analysis. It represents the teaching strategies as cogs or gears that work together to impact on the themes that emerged from data analysis at the beginning of the Program: negative feelings and underachieving behaviours. These teaching strategies combined made the most impact on Luke's negative feelings, and made some impact on his underachieving behaviours.

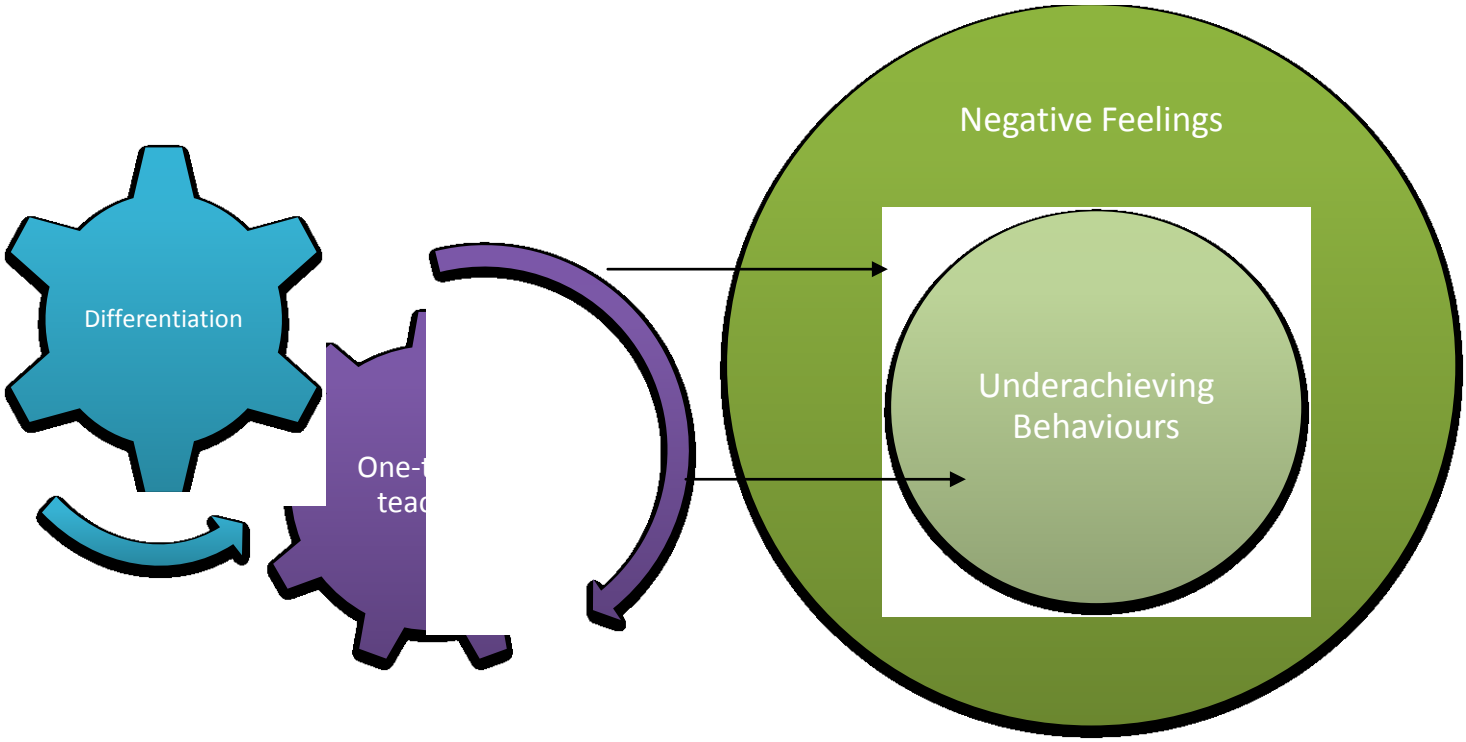


Figure 5.5: Synthesis of Data Analysis Findings on Luke

Link to the Next Chapter

This chapter has provided the findings from the second case study on Luke in order to answer the two research questions in terms of Luke. In Chapter 6 – Discussion and Recommendations, the findings from both of these case studies (Chapter 4 and 5) will be analysed in the context of the literature on this topic.

CHAPTER 6: DISCUSSION AND RECOMMENDATIONS

In this chapter, the Findings from the two case studies presented in Chapters 4 and 5 will be discussed in the context of the current literature on the topic of underachieving gifted students. This is done in order to identify gaps, overlaps and controversies between the findings of this study and the findings in the literature. It is the aim of this chapter to provide answers to the following research questions:

- What is the impact of a Creative Writing Program on an underachieving gifted student?
- What teaching strategies are successful in facilitating the achievement of potential in an underachieving gifted student?

In order to answer the first question, the impact of the Creative Writing Program will be discussed according to the themes that emerged through data analysis, referring to both participants in conjunction with claims made from previous research studies. The findings from the two case studies will be presented side-by-side in order to highlight commonalities and differences. This chapter will also discuss the teaching strategies that the researcher found, in light of the literature on this topic. This chapter will conclude by making some recommendations for practice, based on a discussion of these findings in conjunction with findings identified from previous research.

Impact of the Creative Writing Program on an Underachieving Gifted Student

This study found that the Creative Writing Program impacted on the student-participants in the following ways: negative feelings replaced by self-confidence, reversal of some underachieving behaviours; and promotion of social development (Nathaniel only). These themes are discussed below in the context of previous research studies.

Negative Feelings Replaced by Self-confidence

Ways to remedy negative feelings, low self-esteem or apprehensions of underachieving gifted students appears to be a significant gap in the literature. This is despite the fact that most researchers conclude that one of the most common characteristics amongst underachieving gifted students is low self-esteem or low self-concept (Betts & Neihart, 1988; Davis, et al., 2011; Dowdall & Colangelo, 1982; Fine & Pitts, 1980; Gallagher, 1991; McCoach & Siegle, 2003; Montgomery, 2009b; Reis & McCoach, 2000; Whitmore, 1980). It appears that a limited amount of research has identified ways to impact negative self-concepts in underachieving gifted students. Furthermore, the findings of this study identified evidence of quite varied reasons behind why each participant held a negative self-concept of himself.

The findings from the two case studies indicate that both participants, Nathaniel and Luke, had negative feelings, attitudes or insecurities at the beginning of the Program. This finding is consistent with the literature, as low self-concept or self-esteem is identified as quite common in

underachieving gifted students. However, it worth noting that although this appears to be a common theme, Nathaniel and Luke had negative feelings for different reasons. Analyses of data on Nathaniel demonstrated constant self-underestimation, and some doubt in his abilities. Some of his negative feelings were attributed to his struggle with the social aspect of school. In regards to Luke, the data analysis indicated that his negative attitudes seemed to stem from a lack of enjoyment of school. His negative feelings appeared to derive from of a lack of self-confidence and low self-esteem due to living in the shadow of his high-achieving older brother. Thus, the qualitative nature of this study has identified some of the different ways in which negative feelings manifest in underachieving gifted students. This finding adds to the body of literature concerning negative feelings and low self-esteem in underachieving gifted students (Betts & Neihart, 1988; Davis, et al., 2011; Dowdall & Colangelo, 1982; Fine & Pitts, 1980; Gallagher, 1991; McCoach & Siegle, 2003; Montgomery, 2009b; Reis & McCoach, 2000; Whitmore, 1980).

In both case studies, data analysis revealed that the Creative Writing Program, comprised of practical teaching strategies, has impacted the area of negative feelings and low self-esteem. At the end of the Program, all sources of data corroborated that the negative feelings of both student-participants had been replaced by self-confidence. This finding fills an area in the literature that is under-researched. Data analysis conducted to answer the second research question identified that the teaching strategies that were successful for facilitating the achievement of potential in the underachieving gifted students were one-to-one teaching, positive teacher identification and differentiation. It is possible that one, or a combination of these strategies, were responsible for replacing low self-esteem with high self-confidence or self-efficacy in the student within this study. These findings have added to our understanding of how practical teaching strategies can impact positively on underachieving gifted students, enabling them to develop self-confidence. To date,

this has not been a central focus of the findings reported in previous literature on underachieving gifted students.

Though there is scarce current literature on how to impact the self-esteem of underachieving gifted students, there are a small amount of studies that appear to substantiate the findings of this study. Whitmore (1980) suggested that an individualised program that attempts to meet the needs of the individual child can have an effect on self-esteem and promoting self-efficacy. This is, in essence, what the researcher achieved through the implementation of the Creative Writing Program, with an individualised one-to-one teaching strategy.

The finding that a one-to-one strategy could instil feelings of self-confidence in an underachieving gifted student is supported by Kulik (2003). He identified that gifted students' self-concepts tend to be higher when they are ability grouped, or withdrawn from mainstream classes. It is possible that the one-to-one strategy found to be successful in the Creative Writing Program has contributed to this outcome because the strategy involved the students being withdrawn from their regular class. The finding that positive teacher identification could possibly encourage feelings of self-confidence is also corroborated by Haensly's (2003) suggestions, based on letters she has received from students. She claims that the support of personal attention from the teacher results in development of self-confidence. Kendrick (1998) and Whitmore (1980) have both identified the important role of the teacher in promoting self-esteem in underachieving gifted students. Kendrick (1998) conducted one case study of a primary school-aged child and found that recognition of potential and feelings of being valued by the teacher built self-confidence in an underachieving gifted student. The study documented in this thesis has provided further evidence of the link between self-confidence and achievement in the underachieving gifted student.

Underachieving Behaviours

This theme was another area of commonality between Nathaniel and Luke. The findings revealed that both students displayed underachieving behaviours; however, this study provides evidence of varied forms of underachieving behaviours that appear to be motivated in different ways. Nathaniel had two main behaviours that contributed to his underachievement. The first was that he would stall in class-time as he struggled to put his ideas down on paper. Data analysis also indicated that he would not submit homework on-time. In terms of Luke, submitting homework was also an issue, as was inconsistency and carelessness. These behaviours appeared to be part of the cause of Luke's underachievement. These findings do not dispute findings from previous literature (Davis, et al., 2011; Montgomery, 2009b; Reis & McCoach, 2000; Whitmore, 1980), but expand on the detail, offering more fine-grained information on the diversity within the group of underachieving gifted students.

These findings about underachieving behaviours are also supported by the literature. Montgomery (2009b) lists "failure to complete schoolwork and homework" and "poor execution of work" as common indicators of underachievement in gifted students (p. 6). Whitmore (1980), and Davis, Rimm and Siegle (2011) corroborate this, claiming that these secondary characteristics of underachievement, such as avoiding effort, seem to be directly related to underachieving gifted students "[trying] to protect their precarious self-esteem" (Davis, et al., 2011, p. 299).

The Findings chapters (Chapters 4 and 5) indicate that the Creative Writing Program had a direct impact on these underachieving behaviours in the case of both participants to different extents. Nathaniel's inability to start a class-task was remedied, and the findings indicated that his increased self-confidence motivated him to submit his homework on time. In the case of Luke, his carelessness was remedied, but not his issues with submitting homework on time. The only practical method for reversing these underachieving behaviours that appears in the literature is Rimm's (1995) 'Trifocal Model', a counselling-intervention strategy. It would make sense that the accountability of the one-to-one teaching, used in the Creative Writing Program, would promote reversal of underachieving behaviours, as the researcher's findings suggested.

Social Development

The findings from the beginning of the Program indicated that Nathaniel's intellectual development was far ahead of his social development. These findings regarding a trend towards social development were specific to Nathaniel only. He struggled with peer interactions and found social situations difficult. This finding does not appear to be as common as negative feelings in gifted students who underachieve. However, some of the literature does suggest that finding social situations difficult could be characteristic of underachieving gifted students (Betts & Neihart, 1988; Montgomery, 2009b). Whitmore (1980) claims that low social skills may relate to a negative self-esteem in an underachieving gifted student (1980, p. 275). This is corroborated by the findings of this study regarding Nathaniel.

The findings at the end of the Program revealed that Nathaniel showed a trend towards increased social development that was more synchronous with his intellectual development, as a result of his involvement in the Creative Writing Program. This finding contributes evidence to the current body of research about the possible socially asynchronous development of underachieving gifted students (Betts & Neihart, 1988; Montgomery, 2009b; Whitmore, 1980), suggesting that social development that is asynchronous with intellectual development can, in fact, be characteristic of some underachieving gifted students.

There is currently very little literature that suggests that an instructional-intervention strategy, such as the Creative Writing Program, would impact a student's ability to socially connect with other students. Nonetheless, the findings of this study indicate that the Creative Writing Program made an impact on Nathaniel's social development. It is uncertain what aspect of the Program has caused increased social development; it may have been one of the successful teaching strategies, but no other literature corroborates this. The researcher's findings suggest that greater social awareness may have been the result of studying fiction as students were encouraged to write about characters in a way that required the student to engage and empathise with their main character. Whitmore's (1980) findings substantiate this claim: "literature [is] an excellent stimulant to discussion that leads to social learning" (p. 293). She further adds that imaginative stories can be effective in achieving increased social awareness. The findings from this study have reinforced the value of Whitmore's 30 year-old findings, and indicate that creative processes may have a direct influence on reversing underachievement in gifted students.

Summary of Impact of the Creative Writing Program

The key finding of this study is that even though similar themes emerged in the data between Nathaniel and Luke, there were distinct variations within those themes. Nathaniel and Luke are different types of underachievers, and yet the Creative Writing Program has been effective in impacting their different manifestations of underachievement. The findings of this study have further indicated the fine-grained ways in which underachieving gifted students are diverse. Betts and Neihart's (1988) 'Profiles of the Gifted and Talented' found that there were six diverse profiles of giftedness. The researcher's findings add to these findings, and indicate that there is diversity even within those profiles. Underachieving gifted students underachieve for different reasons, they display different underachieving behaviours, and they have diversely motivated negative feelings.

The findings from this study have contributed additional information to our current understanding of the characteristics of underachieving gifted students, and the possible reasons for such characteristics. Furthermore, the findings from this study indicate that negative feelings, underachieving behaviour and socially asynchronous development can be impacted by a program, such as the Creative Writing Program, that employs successful teaching strategies such as one-to-one teaching, positive teacher identification and various forms of differentiation. In some areas, the findings from this study have updated findings from 30 year old studies, such as Whitmore's (1980) study.

Teaching Strategies that Facilitate the Achievement of Potential in Underachieving Gifted Students

In this section, the findings available from the literature about teaching strategies and underachieving gifted students will be compared with the findings of this study. This section of this chapter is concerned with the practical strategies that have facilitated achievement of potential in the two underachieving gifted students involved in the two case studies. It is important to note that the Literature Review (Chapter 2) conducted for this study found the literature to be strong on identification of characteristics and definitions for underachievement; however, insubstantial practical strategies had been investigated (Gallagher, 1991; McCoach & Siegle, 2003; Reis & McCoach, 2000). This section of the chapter focuses on the practical strategies for facilitating the achievement of potential in gifted students.

One-to-one Teaching

As Reis and McCoach (2000) suggest, future research needs to investigate whether or not part-time gifted programs could remedy the incidence of underachievement in gifted students. This study investigated the effectiveness of one-to-one teaching as a strategy to facilitate the achievement of potential in two underachieving gifted students, and thus addressed the gap in the literature identified by Reis and McCoach.

The findings from this study found that both Luke and Nathaniel benefited from the one-to-one teaching. In regards to Luke, the findings showed that every source of data gathered corroborated that one-to-one teaching had facilitated the achievement of his potential. This strategy was beneficial because it held Luke accountable, in a way that a large class environment could not, and thus challenged his underachieving behaviours of carelessness and inconsistency. Other findings indicated that one-to-one teaching, as employed in the Creative Writing Program, impacted Luke's negative feelings and fostered self-confidence because of the individualised attention he received. Similarly, one-to-one teaching was found to be a practical strategy for facilitating achievement of potential for Nathaniel. The findings showed that he could concentrate better and that the individualised attention affected his underachieving behaviours, such as his avoidance of tasks that he perceived as being too difficult. The findings qualified that one-to-one teaching was a beneficial supplement to mainstream classes.

The literature on this topic has identified that ability grouping or withdrawal groups can be successful for gifted students (Kulik, 2003). According to Kulik and Kulik (1991) "high aptitude and gifted students benefit academically from programs that provide separate instruction for them" (p. 191). The findings from this study have extended Kulik and Kulik's findings by indicating that specifically one-to-one teaching has benefited the academic progress in two underachieving gifted students. This is a significant finding to add to the existing literature, as it provides evidence that one-to-one part-time withdrawal may be successful for other underachieving gifted students.

Hoover-Schultz (2005) claims that strategies, such as one-to-one teaching, have been unsuccessful in the past due to the limited time, space and resources of schools to implement the strategy effectively (p. 48). This study has found that this one-to-one strategy can be successfully

implemented in schools, and is effective for facilitating the achievement of potential in the two underachieving gifted students in this study.

Positive Teacher Identification

The findings of the study indicated that positive teacher identification was an important strategy that facilitated the achievement of potential for Nathaniel during the Creative Writing Program. However, there was insufficient data to suggest that this practical strategy had been a catalyst for Luke achieving his potential. The positive relationship the researcher fostered with Nathaniel throughout the duration of the Creative Writing Program instilled self-confidence in him, and directly encouraged the achievement of his potential.

This finding, that relationships are important for remediating underachievement in gifted students, is confirmed by the existing literature. Davis, Rimm and Siegle (2011) identify that once a student identifies with a role model and realises that the costs involved in working to their potential are worthwhile, that the student's underachieving behaviours will begin to reverse (p. 319). Gagné's (1993, 2007) theory of giftedness, indicates that teachers are one of the environmental catalysts that can impact the translation of a student's potential into demonstrated performance. The findings from Emerick's (1992) research that found students who reversed their underachievement attributed it to a teacher who had been a positive role model or inspiration for them. Emerick suggested that the role of the teacher was significant to the reversal of underachievement in gifted students. This study has investigated this further, and found that positive teacher identification facilitated the achievement of potential in Nathaniel.

The finding that positive teacher identification did not appear to be significant for Luke is also a significant finding in a different way. This reinforces, and adds to, the current literature that repeatedly identifies that underachieving gifted students are a diverse group (with diverse manifestations of underachievement) and therefore require a range of approaches and strategies for intervention (Betts & Neihart, 1988; Reis & McCoach, 2000, p. 166; Rowley, 2008; Whitmore, 1980). It is apparent, from the findings of this study as well as the findings from existing literature, that there is no one strategy that will work to reverse all forms of underachievement in gifted students.

A subsidiary finding of this study was that some teachers believe that gifted students do not require extra support and that this attitude may impact the relationship a teacher has with a student. Lassig (2009) found that there was a correlation between professional development and education for teachers on the topic of gifted students and a positive attitude towards gifted programs (p. 39). Considering the impact teachers can make on facilitating the achievement of potential in underachieving gifted students, as shown in the findings of this study and existing literature, an emphasis on teacher-education is a significant finding.

Differentiation

The findings of this study demonstrated differentiation to be a teaching strategy that was successful in facilitating the achievement of potential in both underachieving gifted students in this study. It

was found that both participants needed differentiation for different reasons. The findings indicated that Nathaniel needed differentiated in content and a challenge that would stimulate his intellect as suggested by Betts and Neihart (1988), Reis and McCoach (2000), Whitmore (1980) and Rafidi (2008). According to the findings Nathaniel also needed differentiation to engage his learning style. As he is a very literal thinker and observation indicated he had a mathematical/logical learning style, and he required differentiated instruction and time limits to complete tasks.

Alternatively, for Luke, interest-based differentiation was a key to facilitating the achievement of his potential. A number of studies have suggested that this may be successful in remediating underachievement (Emerick, 1992; Reis & McCoach, 2000; Rowley, 2008; Whitmore, 1980). The findings on Luke consistently related interest to motivation, and motivation to achievement. This kind of individualised learning that engaged Luke's interests in computers, blogging, creativity, and his preferred genre of fiction was found to be effective in helping Luke start to achieve his potential. It is a noteworthy finding that different aspects of differentiation were required for each student.

A considerable number of authors (Black & Tromley, 1997, pp. 16-17; Emerick, 1992; Fine & Pitts, 1980, p. 53; Reis & McCoach, 2000, p. 165; Rowley, 2008, p. 36; Whitmore, 1980, p. 398) suggest that differentiation could be successful for remediating underachievement in gifted students. However, Reis and McCoach (2000) identify this as an area that needs to be researched and investigated to determine the effectiveness of this as a strategy in reversing underachievement in gifted students (p. 166). This study has investigated differentiation as a practical strategy to reverse underachievement. The findings of this study indicate that this strategy (in conjunction with the aforementioned one-to-one teaching, and positive teacher identification) has been successful in

reversing underachieving behaviours and impacting negative feelings and attitudes in two very different underachieving gifted students.

Differentiation, as defined by Kaplan (2009), involves three types of differentiating: according to the individual needs interests and abilities of the student; according to the content and skills to be taught; and according to how the content and skills are taught (p. 107). According to the findings of this study, Luke primarily needed interest-based differentiation, whereas Nathaniel needed content and teaching strategy differentiation. It is an important finding of this study that both participants needed differentiation in order to achieve their potential, but furthermore they needed different forms of differentiation to meet their individual needs.

Sisk (2009) claims that there is a myth that the regular classroom teacher "can go it alone" with differentiation, when in actual fact without "professional development and the willingness to address the individual needs of gifted students" teachers will struggle to implement effective differentiation (p. 270). An unexpected finding from this study found that some teachers tend to have a negative attitude towards gifted students, particularly those who underachieve, and their involvement in withdrawal programs. According to the findings of this study, some teachers believe that gifted students do not need help to achieve.

There is no denying the benefit of differentiation for gifted students; however, it must be qualified that differentiation is most effective when a trained person or specialist is involved (Hertberg-Davis, 2009; Sisk, 2009). This further seems to support that positive teacher identification and differentiation are interwoven practical strategies for facilitating the achievement of potential in gifted students. Furthermore, though differentiation is beneficial for gifted students who

underachieve, Hertberg-David (2009) argues that classroom differentiation should not take the place of gifted programs, further supporting the findings of this study that one-to-one programs, like the Creative Writing Program, are also beneficial for facilitating the achievement of potential in underachieving gifted students.

Recommendations for Practice

The recommendations for practice, which become apparent from the findings of this study, lead on from the previous section that outlined the teaching strategies which were found to be effective with two underachieving gifted students in this study. These recommendations are significant because they provide practical direction for teachers of underachieving gifted students.

Encourage the development of one-to-one teaching opportunities for underachieving gifted students. One-to-one teaching proved successful, in this study, for both underachieving gifted participants. They both benefited from the accountability and individualised attention that one-to-one teaching provided them. If one-to-one is not possible, due to time and budgetary constraints of the school, which Hoover-Schultz (2005) identified as a possibility, teachers should be recommended to find ways to implement a smaller teacher-student ratio and ability grouping, which are the two premises one-to-one teaching is built upon.

Promote positive teacher/student relationships with underachieving gifted students. This study found that positive teacher identification was a key component that facilitated the achievement of

potential in Nathaniel. This study further confirmed the substantial literature (Davis, et al., 2011; Emerick, 1992; Gagné, 1993, 2007) that indicates teachers have a profound impact on the achievement of potential in achieving gifted students. This was an effective strategy in the context of the Creative Writing Program that can be easily implemented in mainstream classes.

Differentiate for underachieving gifted students. Differentiation was a teaching strategy that was found to be effective with two underachieving gifted students, when it was addressed according to their individual learning needs. This was an effective strategy in the context of the Creative Writing Program. However, the existing literature indicates a need for teacher training in order to effectively differentiate for underachieving gifted students in the classroom (Hertberg-Davis, 2009; Sisk, 2009). Nevertheless, underachieving gifted students need differentiation according to interest, content and how the content is taught according to their individual needs if they are going to achieve their potential.

Develop multiple strategies. Overall, the findings of this study, in conjunction with the literature, emphasise the need for "developing multiple approaches" to deal with underachievement in gifted students (Reis & McCoach, 2000, p. 166). Underachievement manifests in a range of ways (Betts & Neihart, 1988; Davis, et al., 2011; Reis & McCoach, 2000). A range of intervention strategies should be tailored to the needs of the individual underachieving gifted students if they are to be successful in remediating underachievement.

Conclusion

The findings of this study indicate that the Creative Writing Program has impacted the two underachieving gifted students, Nathaniel and Luke, by way of replacing their negative feelings with self-confidence and reversing some of their underachieving behaviours. Furthermore, the Creative Writing Program made an impact on Nathaniel's social development.

This study provides evidence that specific teaching strategies can be implemented to facilitate the achievement of potential in underachieving gifted students. These strategies include: one-to-one teaching, positive teacher identification and differentiation. Four main recommendations for practice have derived directly from the findings from this study. These recommendations are as follows: use of one-to-one teaching strategies; foster positive teacher-student relationships; differentiate; use multiple approaches to address underachievement.

Link to Next Chapter

This chapter has provided a discussion of the findings from this study, in conjunction with the literature. Included in this chapter were suggested recommendations for practice, which are intended to be useful for teachers of underachieving gifted students. The following final chapter provides conclusive statements about the study, outlines the strengths and limitations of the research and provides recommendations for future research.

CHAPTER 7: CONCLUSION

The research study, documented in this thesis, has employed two separate in-depth case studies to answer the following two research questions:

- What is the impact of a Creative Writing Program on an underachieving gifted student?
- What teaching strategies are successful in facilitating the achievement of potential in an underachieving gifted student?

Data were gathered from multiple sources and perspectives to answer these research questions. In order to answer the first research question, the Creative Writing Program was found to have impacted on Nathaniel in terms of: his negative feelings were replaced by self-confidence; his underachieving behaviours were reversed; an increase in his social development, so it is more synchronous with his intellectual development. The Creative Writing Program was found to have impacted on Luke in terms of: his negative feelings and insecurities were replaced by self-confidence; and some of his underachieving behaviours were reversed. Overall, the Program impacted on both underachieving gifted students in ways that affected their personal and academic development.

In order to answer the second research question, this study identified three teaching strategies that were found to be successful in facilitating the achievement of potential in two underachieving gifted students. In terms of Nathaniel, the following teaching strategies were found to be successful: one-to-one teaching, positive teacher identification, and differentiation. In terms of Luke, two teaching strategies were found to be successful: one-to-one teaching and interest-based differentiation. Overall, these findings suggest that successful teaching strategies for

underachieving gifted students involve recognising students' individual characteristics and tailoring approaches to suit each student.

Strengths of the Research

The main strength of this study was considerable amount of data that were gathered during the one-to-one teaching of the student-participants in the Creative Writing Program and data gathering processes (includes interviews and transcriptions, observations, delivery of the pre- and post-test and accessing school records). These data covered multiple perspectives (student-participant, teachers, parents and researcher), and were from multiple sources (interviews, pre- and post-test, field notes and observations). There was strong reinforcement of findings as the themes that emerged through data analysis were well substantiated by multiple sources, indicating that the findings were credible and trustworthy. Furthermore, the data were gathered over an extended period from March to July, 2011.

The involvement of two participants in two separate case studies was a key strength of this research that highlighted the different ways in which underachievement manifests in gifted students. Keeping the two case studies separate was especially effective in yielding fine-grained finding that were different for each participant.

Another strength of this research was the positive relationship the researcher built with the school and teachers. Without this relationship, data gathering would have been far more tedious. The

relationship the researcher made with the teachers involved informed her professional practice as did the findings of this study. This relationship with the teachers involved in this research gave the researcher a person inside the school advocating for the required amount of access to the students to complete the Creative Writing Program. This relationship with the teachers also added to the ease of access to school documents and records. Because the researcher had fostered a good relationship with the school and key teachers, the school and teachers were very supportive of the research achieving the aims of this study. This support at school level also influenced and encouraged the support of the student-participants' parents.

Limitations of the Research

The research study was limited to creative writing as this was highlighted as an area of need for both participants by their teachers. Similar research studies could be trialled with other content bases, such as Mathematics, Science or History. However, the researcher had to limit this study to solely creative writing in order for it to be achievable.

Though the amount of data was one of the greatest strengths of this research, it also proved to be one of the limitations of the study as analyses of the substantial amounts of data were quite time consuming, particularly considering the tight timeframe the researcher was operating within. At times, unforseen school events impeded the Creative Writing Program's progress. Due to the limitations and time constraints on this study, not all sessions that were missed by the student-participants could be caught up. Due to time constraints, a small proportion of the interview data were gathered over email, where face-to-face interviews would have been preferred.

It is possible that the pre- and post-tests asked the student-participants to do too much in the 40 minute allocation. If this research were to be replicated, the researcher would suggest that the pre- and post-test be revised to require a written response to one question only, not two.

Recommendations for Future Research

Based on the findings of this study, the researcher makes the following recommendations for future research. Positive teacher identification was found to facilitate the achievement of potential in an underachieving gifted student. It would be worthwhile to conduct research into teachers' knowledge of, and attitudes towards, underachieving gifted students. It would be interesting to examine the impact of these attitudes on underachievement in gifted students.

To further investigate the individual ways in which underachievement manifests in gifted students this study could be replicated with more case study participants. Alternatively, future research could replicate this study in application to other key learning areas, such as Mathematics, Science or History and investigate the impact of intervention strategies on underachieving gifted students.

There is significant literature suggesting ability grouping can be beneficial for gifted students; an area for future research could build from this and investigate the impact of one-to-one teaching on underachieving gifted students. The researcher believes it to be of paramount importance that more research is conducted into finding successful strategies to facilitate the achievement of potential in

underachieving gifted students. Furthermore, research that focuses on strategies for building self-confidence in underachieving gifted students may prove successful for remediating academic underachievement. This is an area for further study.

As it has been found to be successful in this study, methodologically it would be beneficial for further research to employ:

- case study approaches to investigate individual manifestation of underachievement in gifted students and strategies for intervention that align with participants' needs;
- an extended timeframe; and
- multiple sources of data gathering to provide a comprehensive picture of underachievement in a gifted individual.

Finally, future research should continue to include the perspective and voice of the underachieving gifted student, as modelled in this study.

Conclusion

The collective findings of the study highlight the need for teachers to give personalised attention to underachieving gifted students. Because of the diversity within the underachieving gifted student population, there cannot be a *one-size-fits-all* approach. This case study research has shown a part-time withdrawal program, the Creative Writing Program, to impact positively on two underachieving gifted students. As a result of the implementation of the Creative Writing Program, successful teaching strategies have been identified which have facilitated the achievement of potential in two underachieving gifted students. From this study it is clear that underachieving gifted students are rich in potential; however, they do need carefully planned intervention programs enhanced by individualised teaching strategies, to see their vast potential realised.

> "The underachieving gifted child represents both society's greatest loss and its greatest potential resource."
>
> (Davis, Rimm, & Siegle, 2011, p. 287)

> "I do not know how far [they] can be taken. And isn't that fantastic? ... What a joy to teach them! What a responsibility to teach them"
>
> (Dr Smith)

APPENDIX 1: APPROVAL STATEMENT FROM THE HUMAN RESEARCH ETHICS COMMITTEE, AVONDALE COLLEGE OF HIGHER EDUCATION

Avondale
COLLEGE OF HIGHER EDUCATION

From the Office of the Vice President
(Administration and Research)
Email: vivienne.watts@avondale.edu.au
Tel: 02 4980 2120
Fax: 02 4980 2117

14 April 2011

Dr Maria Northcote
Faculty of Education & Science
Avondale College
PO Box 19
COORANBONG NSW 2265

Dear Maria

Thank you for submitting your revised application and supporting documents to the Avondale College of Higher Education Human Research Ethics Committee for Hannah Bennett's Honours project *A Creative Writing Program as an Intervention Strategy to Facilitate the Achievement of Potential in an Underachieving Gifted Student: A Case Study.*

The committee accepted the revised documentation. However, the committee would like a further amendment to the application, that is to remove the male biased language of question B3 and the word 'any' from the second sentence of the same question. When the Chair has received this amendment, final approval will be granted.

Once final approval is granted, the following additional standard conditions will apply:

1. That you notify the committee of any changes to circumstances or research design, which might require a review of the ethics approval.
2. That you provide an annual interim report of your progress to the committee, and a final report once this project is completed. The first report will be due twelve months from the date you commence the research.

We look forward to receiving your response soon.

Sincerely

V. Watts

Dr Vivienne Watts
Chair
Human Research Ethics Committee

APPENDIX 2: CRITERIA FOR PARTICIPATION

Giftedness

Criterion	Author
"Distinctly above average" potential	Gagné (1993, 2007)
"Multiple criteria"	(Davis, et al., 2011; Reis & McCoach, 2000; Whitmore, 1980)
Standardised test scores: top 3% of intellectual ability, two standard deviations above mean	(Davis, et al., 2011)
Intelligence test: IQ score higher than 130	(Davis, et al., 2011)
Teacher recommendation	Renzulli's 'Teacher Nomination Form' (Davis, et al., 2011); (Whitmore, 1980)

Underachievement

Criterion	Author
Discrepancy between potential (as shown in standardised tests) and performance (as shown in class grades and teacher recommendation)	(Davis, et al., 2011; Montgomery, 2009b; Reis & McCoach, 2000)
Class grades	(Davis, et al., 2011; Montgomery, 2009b; Reis & McCoach, 2000)
Teacher recommendation	(Reis & McCoach, 2000; Whitmore, 1980)
Extended period of time	(Reis & McCoach, 2000)

APPENDIX 3: SEMI-STRUCTURED INTERVIEW (STUDENT – BEGINNING OF PROGRAM)

Researcher's Names:

Principal Investigator: Dr. Maria Northcote and Dr. Adelle Faull

Co-investigators: Hannah Bennett, Current Honours student

Sources:

Betts, George. T., Neihart, Maureen. (1988). "Profiles of the Gifted and Talented". *Gifted Child Quarterly*, *32*(2), pp. 248-253.

Faull, Adelle. (n.d.). "SWOP Questionnaire", in *Avondale School SWOP Handbook*. Cooranbong: Avondale School.

Whitmore, Joanne. (1980). *Giftedness, Conflict and Underachievement*. Boston: Allyn & Bacon.

Date: **Time:**

1. How would you describe yourself?
2. What subjects are your best subjects at school?
3. Do you think you have outstanding potential in any area? Explain.
4. At what level do you generally perform in these subjects? (Below average, average, well above average, way above average) Why?
5. Do you get "bored" in class? Why/why not?
6. Do you find it easy to get distracted in class? What distracts you?
7. Do you ask or answer questions in class? Why/why not? How often?
8. Do you think you are achieving at your best level in all your subjects? Why/why not?

9. Do you feel that you are underachieving in any of your subjects (ie. not doing you best)? Why?
10. If your teacher assigns you homework, do you complete it? Why/why not?
11. When do you complete the class assignments you are given? (when I'm given them, over the weeks leading up to the due date, the night before, hand them in late) Why?
12. Do you think you put your best effort into your assignments?
13. Do you think your class work, homework and assignments are a true reflection of what you're capable of doing?
14. Do you set goals for yourself? Why/why not? Do you reach the goals you set? Examples.
15. What does/would motivate you to put effort into school work?
16. What changes would you like to see in your learning experiences?
17. Would you like to be involved in a program that extends your learning experiences at school?
18. What would make school more interesting for you?
19. What is your attitude towards school?
20. What are your hobbies or interests?
21. How do you spend most of your spare time?
22. Do you research, or seek to learn more about, your hobby/interest? How?
23. What do you consider to be your most outstanding achievements?

APPENDIX 4: SEMI-STRUCTURED INTERVIEW (STUDENT – END OF PROGRAM)

Researcher's Names:

Principal Investigator: Dr. Maria Northcote and Dr. Adelle Faull

Co-investigators: Hannah Bennett, Current Honours student

Date: **Time:**

1. Now that the program has finished, how would you describe yourself?
2. What subjects do you consider your best subjects at school?
3. Do you think you have outstanding potential in any area? Explain.
4. How have your feelings changed about yourself, and what you're capable of?
5. What are the top two things you've learned about yourself as a result of doing this program?
6. Do you feel you're underachieving in the area of creative writing?
7. Has the work you've completed in the creative writing program, been a true reflection of what you're capable of doing?
8. How do you feel about the story you wrote for the creative writing program?
9. Was there ever a time you wanted to quit the program? Why did you want to quit? Why did you choose to stay?
10. Will you continue to creatively write now that this program has finished? Explain.
11. Has this program been beneficial to you? In what way?
12. How was the one-on-one learning style? What did you like/dislike about it?
13. What was your favourite and least favourite part of the program?

14. Have you noticed any difference in your attitude to learning? And specifically, creative writing? Explain.
15. Did this program help you become more motivated about school and learning, more generally?
16. Would a program, like this, be useful to you in the future?
17. How did you feel about the activity you did today (June 9) in Period 4? Do you feel you were able to achieve to your best ability? Why/why not?

APPENDIX 5: PRE-TEST

Name: _____ **Date:** / /2011

Instructions:

- Attempt two of the three questions listed below. Clearly show which question you are attempting.
- For **one** of the questions you have selected **write a sustained written response**. (You should allow 30 mins of your time to complete this.) For the **second** question you have selected **write a detailed plan** of the story you would write. This includes: ordered dot points of the main things in your story. (You should allow 10 mins of your time to complete this.)
- You may use your computer to type up these tasks instead of hand-writing them. Do not use the Internet or any other resources on your computer to aid you in these tasks.
- This should be completed under exam conditions.

Question 1:

"A figure appeared. A long black cloak covered his body, neck to knee. Except for the glint of silver at his hip, where a fierce sword hung, ready to be drawn."

Write a short story around this quote. You may choose it as your opening or closing line, or place it somewhere significant in your story. If you choose to do a plan for this question, make sure you clearly indicate where this quote would be used.

Question 2:

Using the image provided as a stimulus, write a short story. This image, or idea, needs to appear somewhere significant in your story. If you choose to do a plan for this question, make sure you clearly indicate where this image, or idea, would be used.



Question 3:

15 year old Nathan is bullied at school because he's really clever. He loves dinosaurs and wants to be a palaeontologist. He wears braces. He has a jagged fringe, cut by his mother. He has a Mario Bros backpack that he is teased about – he got is last Christmas from his Nan. Sadly, his Nan died three weeks ago.

Write a short story, with Nathan as the main character. If you choose to the plan for this question, make sure you clearly indicate where some of Nathan's unique characteristics are mentioned or used in the story. Feel free to add more unique characteristics to Nathan.

APPENDIX 6: POST-TEST

Name: _____ **Date:** / /2011

Instructions:

- Attempt two of the three questions listed below. Clearly show which question you are attempting.
- For **one** of the questions you have selected **write a sustained written response**. (You should allow 30 mins of your time to complete this.) For the **second** question you have selected **write a detailed plan** of the story you would write. This includes: ordered dot points of the main things in your story. (You should allow 10 mins of your time to complete this.)
- You may use your computer to type up these tasks instead of hand-writing them. Do not use the Internet or any other resources on your computer to aid you in these tasks.
- This should be completed under exam conditions.

Question 1:

"There's no way I can do that," he said.

Write a short story around this quote. You may choose it as your opening or closing line, or place it somewhere significant in your story. If you choose to do a plan for this question, make sure you clearly indicate where this quote would be used.

Question 2:



Using the image provided as a stimulus, write a short story. This image, or idea, needs to appear somewhere <u>significant</u> in your story. If you choose to do a plan for this question, make sure you clearly indicate where this image, or idea, would be used.

Question 3:

"He races to the top of the dune and looks down onto the strand. There is water and wet sand and dry sand and small pokes of sharp grass dotted along the beach. He looks east, to the rugged cliff face, then west, to the lighthouse in the distance. There's no one he can see, no one he can call to for help."[1]

Write a short story, beginning with this as the opening paragraph. If you choose to the plan for this question, make sure the rest of your story directly relates to this.

[1] *Note: this excerpt has been adapted from 'Sticks and Stones' by Trezza Azzopardi.*

APPENDIX 7: SEMI-STRUCTURED INTERVIEW (TEACHER – BEGINNING OF PROGRAM)

Researcher's Names:

Principal Investigator: Dr. Maria Northcote and Dr. Adelle Faull

Co-investigators: Hannah Bennett, Current Honours student

Date: **Time:**

Teacher: **Subject:**

Sources:

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_ (n.d.). "Parent Nomination Form", in *Pennant Hills High School Enrichment Studies Handbook*. Sydney: Pennant Hills High School.

1. How would you describe the student? Key words?
2. How would you describe his attitude towards school?
3. How do you think the student would describe himself? Key words?
4. How would you describe the student's motivation for school and learning?
5. Does he often get "bored" or distracted in your class?
6. How engaged does he appear to be in your class?
7. How often does he ask or answer questions in class? Of what nature do these questions tend to be?

8. How would you describe his behaviour in your class?
9. How would you describe his peer interactions?
10. Do you think the student shows signs of laziness?
11. How quickly does he grasp the principles of your subject, in relation to his peers?
12. How would you describe his vocabulary, in relation to his peers?
13. How would you describe his mastery of skills, in relation to his peers?
14. How would you describe his recall of factual information?
15. What is your student's favourite subject? Why do you think it is his favourite?
16. Is there anything he finds distressing or upsetting about school or the subject you teach him?
17. How often does the student complete homework? Does he hand in assignments on time?
18. To what standard are his assignments and homework?
19. Do you think his class work, homework and assignments are a true reflection of his capabilities?
20. What standard of work do you believe the student to be capable of?
21. Do you think the student is achieving to his potential?
22. Is there anything that the school could do to see the student reach his potential?

APPENDIX 8: SEMI-STRUCTURED INTERVIEW (TEACHERS – END OF PROGRAM)

Researcher's Names:

Principal Investigator: Dr. Maria Northcote and Dr. Adelle Faull

Co-investigators: Hannah Bennett, Current Honours student

Date: **Time:**

Teacher:

1. Has there been any change in the students' attitude to learning?
2. Has there been any difference in the student/s level of engagement in your class since being involved in this Program?
3. Do you think the Program has been beneficial to the student/s? How?
4. Has the student/s class involvement changed as a result of being in the Program?
5. Do you think the student/s is closer to achieving his potential since being involved in this Program?
6. Has there been any other difference, or notable change, in the student/s since they have started the Program?
7. Is this Program a worthwhile way for the school to help these students, and potentially others, to reach their potential? Explain.

APPENDIX 9: SEMI-STRUCTURED INTERVIEW (PARENTS – ONE INTERVIEW)

Researcher's Names:

Principal Investigator: Dr. Maria Northcote and Dr. Adelle Faull

Co-investigators: Hannah Bennett, Current Honours student

Date: **Time:**

Parent:

1. How would you describe your child? Key words.
2. How would you describe his attitude towards school?
3. How do you think your child would describe himself? Key words.
4. How would you describe your child's motivation for school?
5. How would you describe your child's motivation for learning?
6. What is your child's favourite subject? Why do you think it is his favourite?
7. What is the easiest subject for your child?
8. Is there anything he finds distressing or upsetting about school?
9. What are your child's special interests or hobbies?
10. Has your child received any achievements/accomplishments/awards?
11. How does your child spend his free time?
12. Does he show initiative to pursue self-selected interest projects at home?
13. Does your child goal-set? How would you describe his goal-setting?

14. Does your child often bring homework home?
15. Does your child volunteer information about his school work?
16. What have his school reports said about his school work?
17. Do you think your child's school reports reflect his capabilities? Explain.
18. How often do you think your child achieves to his potential?
19. Is there anything the school could do to help him reach his potential?
20. How would you describe your family home environment?
21. What has your child told you about the program? Has your child volunteered information about his schoolwork? Explain.
22. Has there been any difference in your child as a result of doing this program? (Attitude towards school, attitude towards writing activities, motivation for completing homework, motivation for school-based activities, etc.) Please give details.
23. Has this program been beneficial for your son? Why? What aspects?
24. In your opinion, has this program encouraged your son to achieve his potential? How? In what ways?
25. Would you like to see your son continue in a program like this? Why/why not?
26. Is there anything else you would like to add about your son's participation in this program? What are the benefits you have perceived? Have there been any adverse effects or problems as a result of being involved in this program? Explain

APPENDIX 10: SEMI-STRUCTURED INTERVIEW (PARENTS – BEGINNING OF PROGRAM)

Researcher's Names:

Principal Investigator: Dr. Maria Northcote and Dr. Adelle Faull

Co-investigators: Hannah Bennett, Current Honours student

Date: **Time:**

Parent:

1. How would you describe your child? Key words.
2. How would you describe his attitude towards school?
3. How do you think your child would describe himself? Key words.
4. How would you describe your child's motivation for school?
5. How would you describe your child's motivation for learning?
6. What is your child's favourite subject? Why do you think it is his favourite?
7. What is the easiest subject for your child?
8. Is there anything he finds distressing or upsetting about school?
9. What are your child's special interests or hobbies?
10. Has your child received any achievements/accomplishments/awards?
11. How does your child spend his free time?
12. Does he show initiative to pursue self-selected interest projects at home?
13. Does your child goal-set? How would you describe his goal-setting?

14. Does your child often bring homework home?

15. Does your child volunteer information about his school work?

16. What have his school reports said about his school work?

17. Do you think your child's school reports reflect his capabilities? Explain.

18. How often do you think your child achieves to his potential?

19. Is there anything the school could do to help him reach his potential?

20. How would you describe your family home environment?

APPENDIX 11: SEMI-STRUCTURED INTERVIEWS (PARENTS – END OF PROGRAM)

Researcher's Names:

Principal Investigator: Dr. Maria Northcote and Dr. Adelle Faull

Co-investigators: Hannah Bennett, Current Honours student

Date: **Time:**

Parent:

21. What has your child told you about the program? Has your child volunteered information about his schoolwork? Explain.
22. Has there been any difference in your child as a result of doing this program? (Attitude towards school, attitude towards writing activities, motivation for completing homework, motivation for school-based activities, etc.) Please give details.
23. Has this program been beneficial for your son? Why? What aspects?
24. In your opinion, has this program encouraged your son to achieve his potential? How? In what ways?
25. Would you like to see your son continue in a program like this? Why/why not?
26. Is there anything else you would like to add about your son's participation in this program? What are the benefits you have perceived? Have there been any adverse effects or problems as a result of being involved in this program? Explain.

APPENDIX 12: PARTICIPANT CONSENT FORM (PARENTS)

Research Title: An Intervention Strategy to Facilitate the Achievement of Potential in Two Underachieving Gifted Students: Two Case Studies

Researchers: Dr. Adelle Faull, Dr. Maria Northcote and Hannah Bennett

I, _____ agree for my son to participate in the above research project and give my consent freely.

I have read and understood the information provided in the Information Statement to Research Participants.

I understand that the project will be conducted as described in the Information Statement to Research Participants, a copy of which has been given to me to keep.

I understand I can withdraw from the project at any time and do not have to give any reason for withdrawing.

The procedures required for the project and the time involved have been explained to me. I have had the opportunity to ask questions and have had them answered to my satisfaction.

I consent to the following items during the course of the study: allowing my son to undergo Psychometric (IQ) testing, and/or O.P.I. testing; releasing his existing school record data to the researcher; his involvement in the Creative Writing program for 6-8 weeks (2 periods per week); audio-recorded interviews (both myself and my son) before and after the

implementation of the program; the researcher making observations of my son in his normal classroom.

Print Name: _____

Signature: _____ Date: _____

APPENDIX 13: RUBRIC TO EVALUATE CREATIVE WRITING

- Demonstrates a sophisticated (and/or creative) level of encoding through spelling, punctuation and grammar.
- Demonstrates a sophisticated organisation and layout of writing (paragraphing, topic sentences, clear sequence of events, coherence and cohesiveness)
- Creates a sustained and logical text
- Evaluates if their writing achieves the purpose intended. Drafts, revises, edits and rewrites to appropriately encode meaning and achieve purposes
- Has a sophisticated understanding and implementation of language features associated with the text-type (Specific participants; Action verbs; Verbs for saying, thinking and feeling; Usually past tense; Linking words to time; Dialogue; Descriptive words; First or third person pronouns)
- Has a sophisticated level of literal and inferential meaning well-crafted into the text
- In a sophisticated way, appropriately uses terms and language for the audience and/or purpose
- Embeds values into the writing, and draws reader into a reflection of these values

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