Young, Gifted and Underachieving: Examining the role of mentoring in assisting underachieving highly-able students achieve their educational potential

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Signed Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of MA in Education Studies is entirely my own work, that I have exercised reasonable care to ensure that the work is original, and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

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Acknowledgements

Abstract

Young, Gifted and Underachieving: Examining the role of mentoring in assisting underachieving highly-able students achieve their educational potential.

The education of gifted and talented pupils is a topical issue and one of growing concern to many parents and teachers. This was of particular concern in the school in which I was a teacher.

The school determined students as being of high ability when they scored in the top ten percent of the school population as indicated by standardised tests they completed prior to and upon admission. These tests were the Cognitive Abilities Test 3 and the Drumcondra Reasonsing Test. Teachers were also encouraged to identify students who they perceived to be highly able in their subject area.

 The aim of this study was to examine reasons why pupils of high ability might underachieve and to address these issues through the use of a mentoring project. The mentors used positive psychology and metacognition strategies in an effort to get the students to achieve their potential.

Another aim of the study was to consider how a project of this nature might be managed in a large secondary school with limited resources. The use of a distributed leadership model of management in conjunction with a community of practice was examined as part of this study. An action research model was used to conduct the study which focussed on a small group of pupils in one school.

The overall findings suggested that there was merit to mentoring as a potential approach with these students. The students responded well to some of the positive psychology and metacognitive strategies and enjoyed the one to one support the mentoring offered them. However, the study also looks at other ways that some of the more successful strategies might be shared with the students given the labour intensive nature of one to one input in a time of scarce resources and concerns regarding its sustainability. In terms of managing a new initiative in a large secondary school, the distributed leadership model in conjunction with communities of practice was deemed an efficient and effective means of implementation.

List of Abbreviations

CAT 3   Cognitive Abilities Test 3

CTYI   Centre for Talented Youth, Ireland

DCU   Dublin City University

DRT   Drumcondra Reasoning Test

ICEP   Irish Centre Education Psychology

LSP1   Learning Schools Project 1

NCCA   National Council for Curriculum and Assessment

SDP   School Development Plan

SESS   Special Education Support Service

SLSS   Second Level Support Service

TES   Teacher Education Section

Chapter 1

Introduction and Context

1.1 Background

This project took place in St. Mary's Secondary School[1], a secondary school situated in a large town in rural Ireland. It attempted to address to the needs of underachieving but highly able students through the use of mentoring. For the purpose of this study, students who achieved in the top ten percent of the school's population based on two separate standardised test results were considered to be highly able. This is in keeping with the NCCA's (2007) guidelines which are explained in further detail in section 2.2 of chapter 2.

The need to focus on this group was identified after the school had participated in the first Learning Schools Project (LSP1) which was a project funded by the Teacher Education Section (TES) in region 4 of the Education Centre Network. Established in 2004, the TES's remit includes initial teacher education, initial teacher induction and continuing professional development (CPD) throughout teachers' careers. Education Centres are funded by TES and their principal activity is to organise the local delivery of national programmes of teacher professional development on behalf of the Department of Education and Skills. The other partner in supporting schools in LSP1 was the Second Level Support Service (SLSS) also funded by TES. The SLSS provided subject specific as well as generic professional development supports for teachers. For the purpose of CPD provision and support, the network of education centres is divided in to six regions and region 4 refers to Kerry, Cork and Limerick schools and LSP1 was a project unique to region 4. The Learning Schools Project is now in its third cycle (LSP3) but references here only relate to the first project

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[1] The name of the school has been changed

which is now referred to as LSP1. It was through LSP1 that the school identified gaps in its provision for more able students. Further details of the LSP1 will be outlined in section 1.3 in this chapter.

A distributed leadership model and communities of practice were used to structure and organise this mentoring project and these will be discussed in sections 2.11, 2.12 and 2.13.

1.2 St. Mary's Secondary School

St. Mary's Secondary School which was opened in 2001 is an amalgamation of two schools. The school has a population of 1,150 students, a representative cross section of the school going population in the town where it is located. This is indicated by the almost normal curve of results from the Drumcondra Reasoning Test (DRT) and the Cognitive Abilities Test (CAT3) that students complete upon admission to the school. The results of these tests are collated and in an average year the school population has approximately 10% of the students in the 0 – 10 percentile category and 10-15% of students in the 90-100 percentile range (30 or more students a year). The school has students, therefore, with a wide spread of ability levels. As such curriculum and teaching must cater for a wide range of ability in particular in 1st year classes which are mixed ability.

In the initial period following the amalgamation, the school concentrated on addressing the needs of the 0-10 percentile group, in response to parental request, students' needs and legislation. A review, as part of the school development planning process, by the School Development Plan (SDP) coordinator in 2007, using the booklet "Looking at our schools: an aid to self evaluation in second level schools" (Department of Education and Science, 2003)

brought us to reflect that we had not given sufficient attention to the 90-100 grouping. While we had been encouraging students with over 95% in the DRT to apply for admission to the Centre for Talented Youth, Ireland (CYTI) programmes in Dublin City University (DCU) and we were providing challenge for more-able students through extra-curricular activities such as debating groups, young scientist, choir etc, we did not have anything formal in place in terms of addressing the needs of these students in the classroom setting.

1.3 The Learning Schools Project (LSP1)

It was around this time that the school was chosen to participate in LSP1. LSP1, which was funded by TES, was an action research project undertaken over two years. The project's aim was to support school based activities in order to promote the on-going development of the learning school. As the focus of our project, we chose the development of differentiation methodologies in the mainstream classroom aimed particularly at challenging the more-able students in the mixed-ability classroom. It was decided to focus on the incoming first years for the purpose of the project so that we could track the progress of a specific cohort of students.

As part of the project, a team of ten teachers completed an online course on differentiation methodologies for gifted and talented students. This course entitled 'Teaching Gifted and Talented Students' was run by the Institute of Child Education and Psychology (ICEP). The teachers were from a variety of different subject areas including English, Maths, PE, Home Economics and Woodwork. They also were at varying stages of their careers with some being relatively newly qualified and others having been teaching for over twenty years. Within the group, there were teachers who held middle-management posts such as year heads but there

were also teachers who did not hold any posts of responsibility in the school. Following the completion of the course, the ten teachers met regularly to work on developing resources and to discuss the problems that arose when they were implementing these resources. The resources that were designed took the main principles of differentiation and attempted to integrate them in a subject specific manner. The project was led by the deputy principal, whom I assisted with the organisation and management.

The final report about the school's involvement in LSP1, which was written by the deputy principal, deemed the project to be successful. These findings were based on feedback from the teachers, the students and their parents. The report stated that the teachers learnt a lot about differentiating the curriculum and the school believed that many of the students gained as a result. The report suggested that as a result of differentiating the curriculum appropriately, most of the schools more-able students were achieving appropriate levels of challenge in the classroom. Student feedback was obtained through a questionnaire and many parents gave positive informal feedback to the teachers and the principal at parent-teacher meetings. Despite this, there were still a small number of students who, according to their teachers, did not engage with the work they were doing in class. There was a group of approximately eight students who, although they were identified as being of high ability, were not achieving the outcomes that their results on both the DRT (Appendix F) and also the CAT 3 (Appendix G) suggested that they should. Furthermore, these students were identified as having a much higher than average reading age when they completed the D. Young cloze reading test that the Learning Support department administered during the first year. The D. Young test was mainly used to identify students who needed support because their reading ages were below average, however, the information regarding those with a reading age of higher that fifteen also proved useful as a means of cross referencing with the other tests as

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further evidence that the students were of higher than average ability. It was not used, however, as a means of identifying the initial cohort but it did prove to be useful additional information when building a picture of the students' strengths. Many of these students were identified as having a reading age of older than fifteen years when they entered the school in first year aged twelve.

 Teachers claimed that some of these students did not appear at all interested in school despite the teachers' best efforts to engage them. Teachers claimed that others were disorganised and seemed to struggle to structure and organise their study. Some of these students were still arriving late to class, not listening, being disruptive, not doing homework and generally were considered to be underachieving. The more-able students who were self-motivated, organised and who engaged with school, therefore, seemed to benefit from the differentiated tasks however the other students did not engage with the tasks at all.

In one of the final meetings for the Learning Schools Project the teachers discussed their disappointment regarding the students whose needs they felt the project did not address and how best to engage them. In the course of the discussion, the idea of mentoring these students emerged. It was thought that through one to one contact the students could begin to realise their potential. The team of teachers all agreed that they would be interested in mentoring a student but were unsure as how to structure the mentoring, when and where it would take place, what areas they could cover as a mentor. I decided that because so many of the teachers involved in the project felt that these students really would benefit from one to one input, that this would be an area worth investigating.

The literature that the teachers had encountered as part of the ICEP course as well as the information in the National Council for Curriculum and Assessment (NCCA) Guidelines, which all teachers in the group had a copy of, suggested that mentoring could have a positive impact on the students. The parents of many of these students were also concerned about their underperformance in school. This was communicated informally to staff members at parent teacher meetings.

Having no formal training in mentoring myself, I set about researching the topic as well as researching how a project of this nature could be managed in a school such as ours. I looked at the various social and emotional needs of gifted and talented students. While this project focused in the main on academic mentoring, the group of teachers involved all felt it was important to be aware of any social and emotional issues that could be impeding the students from attaining their potential.

Around this time, the Special Education Support Service (SESS) began to officially explore the provision for exceptionally able students in the Irish education system. As St. Mary's had already been working in the area of gifted and talented provision for two years through LSP1, they were selected to work with the SESS in developing strategies for meeting the needs of the more-able students. The SESS was aiming to devise a model of provision that could be suggested to other schools that were looking for help in providing for the needs of their more able students. The involvement of the SESS meant that there was external support for this project. Through the SESS, we were able to offer an after school training session on metacognition to all the teachers involved.

As a result of the research I completed into both the needs of gifted and talented students and into mentoring processes, I decided that the mentoring should focus on helping students to structure their studies more efficiently. The idea of using metacognitive strategies to do this was very appealing. Metacognition refers to getting students to think about their own thinking; how they learn and how they structure, regulate and monitor their learning. I felt that metacognitive awareness could be useful for the students who were struggling to organise themselves and who did not know how to study. I decided that students' attitudes towards school should also be tackled as much of the literature suggested that many more-able students viewed school in a negative light. This idea was supported by the negative attitudes that many of the students being mentored displayed in school. I also felt that getting the students to focus on their future and the best possible outcomes for their possible future selves could be beneficial. The next step was to look at strategies to tackle these issues with the students.

Because it had worked well as part of LSP1, I decided that working as a small group- or a community of practice- would be a model that would be beneficial to use. I felt that this would be particularly useful as I was trying to develop a new programme with few resources and the feedback and advice from my colleagues would be invaluable. I looked particularly at Spillane's model of Distributed Leadership (DL) as a guide as to how this community of practice could operate. Spillane's DL model looks at leadership being stretched over individuals in the school. In order to find out more about each of these approaches and how they might function, I had to embark on reading and research into school management and continuing professional development (CPD) in schools.

1.4 The Historical Context of Gifted and Talented Education

The study of giftedness is a relatively new phenomenon. Up until the twentieth century, people were only identified as gifted after they had made some significant contribution to society (George, 2000). This perspective obviously excluded children and their potential to achieve. In 1905, Alfred Binet and Theophile Simon (1905) developed the first intelligence test in response to a call from the French Minister for Education to devise tests to identify children in need of extra help in school. Binet's principal aim was to create a test that could be used to identify students who were struggling to cope with the school curriculum. Lewis Terman decided that the test could be put to a different use.

Lewis Terman, an American psychologist, is noted as a pioneer in educational psychology particularly in the area of gifted and talented education. Terman was very familiar with the work of Binet and is best known as the inventor of the Stanford-Binet IQ test. Terman used this test as a means of identifying people of high intelligence and worked on a long term study in the area. In 1921, Terman initiated the Genetic Studies of Genius, a long-term study of gifted children (Holahan and Sears, 1995). He found that gifted children did not fit the existing stereotypes often associated with them: they were not weak and sickly social misfits, but in fact were generally taller, in better health, better developed physically, and better adapted socially than other children. The children included in his studies were colloquially referred to as "Termites". (Shurkin, 1992).

As part of his study, Terman investigated the lives of 1,528 students with an IQ of 135 or higher. From his research, he was able to identify several developmental differences between gifted and less gifted students. For example gifted children were able to walk about one

month earlier and their language development began about four months earlier than non-gifted children (Terman, 1926, p.135- 484). Terman's research is significant insofar as it brought the notion of giftedness and gifted and talented education into the consciousness of educators and educational psychologists. It took somewhat longer for the concept to obtain recognition in the Irish education system.

1.5 Exceptional Ability and the Irish Education System

According to the Special Education Support Service (SESS) there are approximately 23,000 exceptionally able children in the Irish education system. The SESS uses the Report of the Special Education Review Committee (SERC) (1993, p.60) as a guide in identifying exceptionally able students. The SESS looks at students with an Intelligence Quotient (IQ) of over 130 on standardised IQ tests to determine the figures but does so with a form of health warning it has adapted from the SERC who caution about adopting a precise cut off point and therefore their figures remain an approximation and guide only.

 The legal situation in Ireland around the provision of resources for special educational needs for the exceptionally able is unclear at present. The Education Act 1998, which governs the legal responsibilities of the government with regard to all aspects of education including special needs, is useful in that it defines certain key terms such as: "special educational needs means the educational needs of students who have a disability and the educational needs of exceptionally able students"{Part 1 Section 2}. The EPSEN Act - The Education for Persons with Special Educational Needs Act, (2004) on the other hand omitted any mention of 'exceptionally able' from the bill, leaving the situation regarding the more-able students unclear for educators.

Currently, all of the resources that are sanctioned for special educational needs are focused on those children below the 10th percentile and it is definitely vital that this support continues. There is, however, no extra provision for children at the 95th percentile without an additional diagnosis of a learning or behavioural difficulty. Much of the literature as will be outlined later suggests that children at the top end of the spectrum equally need interventions in order to support their educational and social/emotional needs. The Council for Curriculum Examinations and Assessment, Northern Ireland (CCEA) in their report *Gifted and talented children in (and out) of the classroom (2006)* paints a picture of the complexity of gifted and talented education;

> Identification of the Gifted and Talented can pose a problem to teachers and education professionals because they are not a homogenous group. The typical picture of the highly able child is of a hard working pupil who diligently completes work and perhaps is known as the class "swot" or "brain box". In reality the picture is more complex than that. Alongside the gifted achievers are those who – despite their gifts and talents – persistently underachieve due to boredom, lack of interest or crippling perfectionism, young people who are cognitively advanced enough to play games with complex rule structures and yet not socially mature enough to deal with the frustration that occurs when their peers cannot grasp their game; children whose giftedness may be masked by the fact that they are not being educated in their first language or also who have a disability. (CCEA, 2006, p.6)

Some positive advances have occurred in Ireland in the area of gifted and talented education in recent years, however. In November 2007, the National Council for Curriculum and Assessment (NCCA) published a document entitled "Exceptionally Able Pupils; Draft

Guidelines for Teachers". Again these guidelines included provision exceptional ability as a special need *"Students who are classified as exceptionally able belong on a continuum of students with specific educational requirements"* (p.6). However, the NCCA document is a set of guidelines and not necessarily a concrete commitment of provision for these pupils.

Another positive initiative is the SESS Equality of Challenge initiative in which St. Mary's has played a principal role. The 'Equality of Challenge' is a small-scale project which aims to pilot models of educational provision for exceptionally able students in post-primary schools. The project currently involves twelve schools but there is a need for it to be extended to more schools to ensure the needs of more-able pupils are met in all second-level schools. A final advance in provision for more-able is that this year National Gifted Education Awareness Day, Friday, April 8, was established with the aim of promoting awareness among teachers of the needs of Exceptionally Able children.

1.6 A Surge of Interest

In recent years provision for Exceptionally Able pupils has become a more topical issue and is often discussed in the Irish media. The CTYI was established in 1992 in DCU and its courses are extremely popular thus highlighting a thirst among some parents to have their children's educational needs addressed even if it necessitates them going out with the classroom and their usual school environment. The CTYI courses, although they do offer some scholarships, are not open to all gifted and talented for geographical and cost related reasons. Further proof of interest in the area of gifted and talented education is the recently created website: www.giftedkids.ie which was established by an exasperated parent Margaret Keane who was frustrated at the lack of resources and information available in

Ireland surrounding the topic of gifted and talented students. The website was established to deal with the issues that confront families with gifted children and the negative stereotypes that exist both in the media and society at large. The website is a support website for parents and teachers of gifted children. The success of the website again, I believe, demonstrates that this is an area of concern for parents.

The media has mirrored the public interest in this area. On Tuesday, November 9th, 2010 RTE One broadcast the documentary Bright Young Things, following the lives of gifted children in Ireland. Many newspapers have also highlighted the area Examples of articles include "Young, gifted and studying forensic science and law at the age of eight" (The Sunday Tribune) "Punching Above Their Weight" (The Irish Times - 11 March 2009) "The Cuts that Target the Talented" (The Irish Times - 11 November 2008).

The growth of media and parental interest in conjunction with the setting up of the SESS Equality of Challenge Initiative and the publication of the NCCA guidelines all demonstrate that this is a very topical issue in Irish education at the moment.

1.7 The Government Position

 In Fine Gael's pre-election manifesto published on 15th February 2011 gifted students were recognised. Under the section appropriated titled 'Quality and Standards', the Fine Gael Manifesto stated:

> Gifted Students: We will examine the supports in place for gifted students and create improved links with third level institutions on a regional basis, to provide gifted

students with access to new programmes or educational resources." (Fine Gael

manifesto, 2011, p.36)

After the election on the 9th of March, Ruairi Quinn of the Labour party was appointed

Minister for Education and Skills when Fine Gael and Labour entered into a coalition

government. In May 2011 in Dail Eireann, Deputy Jonathan O'Brien asked the Minister for

Education and Skills about his plans to provide supports for gifted students. As part of his

reply the Minister said:

"Finally, the programme for Government sets out this Government's commitment to

examining supports in place for gifted students and specifically to the creation of

improved links with third level institutions on a regional basis, to provide gifted

students with access to new programmes or educational resources".

This information was retrieved from the oireachtas website: www.oireachtas.ie on which

transcripts from the Dail can be obtained. The Minister's statement in conjunction with the

Fine Gael manifesto suggests that the current government acknowledge the issue of gifted

and talented education and the need to cater for more-able pupils. However, the question

remains as to whether they have the resources to address the issues in the current economic

climate.

1.8 The Economic Climate

When this project was first conceived in 2009, the country had already entered into a

recession. However, no one could have been able to foresee how bad things were going to get

and the damage that this could do to the education system. Cuts in the number of teachers,

increased class sizes and longer working hours all conspired to have a negative effect on pupils' education and on teacher morale. St. Mary's was no exception. Despite working in a more challenging environment, teachers in St. Mary's volunteered to participate in the project because they believed it was worthwhile. Cognisance of the difficult working conditions the teachers were faced with was an imperative during the course of the project.

1.9 The aims and objectives of this study

The aims of this study, therefore, are to explore reasons why students who possess academic ability may underachieve in school and to see if these reasons can be addressed in one to one mentoring sessions. The aim is to up skill teachers in the areas of positive psychology and of metacognition and determine their usefulness for the students involved. The overall aim is to help the students to meet their academic potential.

Alongside this another aim of the project is to consider how a project of this size can be organised in a large secondary school. The idea of teachers meeting in a community of practice to explore the idea of mentoring it will be examined. Alongside this the concept of distributed leadership will be explored. The aim is to see if these models are effective for the implementation of such a project in a school.

The research questions being posed therefore are as follows: Why do some students who are highly able underachieve? Can this be addressed through one to one mentoring programmes? Should the content of these mentoring sessions comprise of positive psychology and/ or metacognitive strategies? In terms of managing and organising such a project, are communities of practice effective? Is a distributed leadership model of use?

1.10 Conclusion

This project, therefore, explores some unchartered territory in that it seeks to meet the needs of more able pupils in a new and interesting way. It attempts to do this despite the economic difficulties faced by Ireland at present. The project will rely on teacher good will because this particular cohort of students, while having been acknowledged to possess a special educational need, do not receive any extra provisions for this at present.

Chapter 2

Literature Review

2.1 Introduction

Given the scope of this research project, I decided that it would necessary to study five main areas of literature. The mentoring would focus on underachieving, more-able students; therefore it was necessary that I had an understanding of the theory surrounding the education of gifted and talented students and explored the reasons why certain gifted students underachieve. As this project would essentially be a mentoring project for young people the theory surrounding youth mentoring obviously needed to be explored in order to enable me to devise an informed and practical programme for the mentors to implement. As a further justification for choosing to undertake this initiative and to identify strategies that could be of benefit to the participants, I felt the theory of positive psychology should also be explored. Metacognition was also researched to help identify strategies that could be effective. Finally, as this is a school-based action research project theories surrounding school interventions and their management within school structures would also need to be addressed so that the project could be managed successfully.

The literature surrounding each of these topics will now be dealt with in turn in the remainder of this chapter.

2.2 Defining Gifted and Talented

Much of the theory on how we define what constitutes being gifted and talented differs. Indeed I found great variation even in what different theorists understand the words 'gifted'

and 'talented' to mean. I will therefore focus on St. Mary's working definition of the term and explain how the school arrived at this definition based on a combination of recommendations from the literature and the context of the school itself. The students who form the subjects of this study fit into the definition as set out in the school's policy of gifted and talented education.

St. Mary's policy on gifted and talented education has been developed around the definition of exceptionally able students as outlined in the Special Education Review Committee (1993). This definition is strongly influenced by the Marland Report (1973) which originated from the United States. The report from the Special Education Review Committee states that pupils who are exceptionally able or talented are those who have demonstrated their capacity to achieve high performance in one of the following areas:

- General intellectual ability
- Specific academic aptitude
- Creative or productive thinking
- Leadership ability
- Visual and performing arts
- Mechanical aptitude
- Psychomotor ability

The NCCA Draft Guidelines on Exceptionally Able Students highlights the fact that there is no universally agreed term for students who would generally be defined as exceptionally able. It uses the term to "describe students who require opportunities for enrichment and extension beyond those provided for the general cohort of students" (NCCA, 2007, p.7).

However, the NCCA guidelines do suggest that 5-10% of any school population may be exceptionally able (NCCA, 2007, p.8). Deborah Eyre in her article "Gifted and Talented: The Basics" (2008) emphasises the belief that giftedness is something that develops over time. A child's giftedness, according to Eyre, has to be met with the right opportunities. Eyre's model of Gifted Education will be examined in more detail in a later section of this Literature Review.

Bearing these theories in mind, as part of LSP1, St. Mary's staff worked on defining and identifying gifted and talented students within our school context. Our school identifies students using the CAT3- a Cognitive Abilities Test as well as the DRT, the Drumcondra Reasoning Test (Appendix F). Students who were identified as being in the ten percentile were included in a group that the school chose to label more-able students. It was decided to move away from the terms gifted and talented and even exceptionally-able in our particular school context and to broaden our definition to more-able students. This decision was made in light of some of the negative and narrow preconceived ideas that teachers had about what they perceived to be gifted and talented students. The NCCA guidelines warn us of misleading myths in relation to gifted and talented students which leads to negative perceptions. (NCCA, 2007, p.5) We felt a broader term such as more-able would be met with more acceptance by the staff as a whole. In the case of this study the terms gifted and talented, exceptionally able and more-able will be used interchangeably to refer to the students involved and to the broader findings.

The school acknowledges that the CAT3 and DRT are limited in their scope in that they only identify students with specific numeric or literacy ability. Furthermore some students may under perform in exams for a whole variety of reasons. In St. Mary's, we rely on teacher

identification to help detect students with abilities in subjects that are not detected or measurable in the CAT3 and DRT testing. We ask all teachers to suggest students who they consider of high ability but particular attention is paid to subjects like music, PE or art as evidence of ability in these subjects is not measurable in the CAT3 and DRT tests. For the purpose of this study, I will be focussing on students who were identified through the testing process because the mentoring will be of an academic nature for the most part and the testing is the most objective means of selecting participants for a project of this nature.

2.3 George T Betts and Maureen Neihart- Profiles of Gifted Children

Betts and Neihart (1988) developed six profiles of gifted and talented individuals which explain how each type of gifted and talented pupil copes in the traditional teaching environment. These categories were used to inform the NCCA Guidelines. These profiles also identify some of the specific social and emotional needs of the gifted and talented. The literature review on mentoring in section 2.7 below will examine the positive impact mentoring can have on the social and emotional development on young people. Teachers involved in the mentoring were informed of these profiles but they were also told that students could belong to more than one profile and would probably have aspects of all the profiles in some way. Therefore the profiles outlined below were used but were used with caution. The various profiles will now be examined individually in order to enrich our understanding of the social and emotional needs of gifted and talented students and to highlight and justify the strategies that were used as part of the mentoring process.

2.3.1 Type 1- The Successfuls

According to Betts and Neihart (1988, p. 248), the vast majority of the gifted fall into this category. They recognise what is expected of them and they display behaviour in accordance with this. Many of these students depend on their teachers and indeed their parents for structure and focus, and therefore greatly rely on extrinsic motivation. Having never fully acquired the competency or mindset critical to autonomous learning and development, they are eventually tested by the challenge of adapting to life's changes. These students need guidance to change from a fixed to a growth mindset. They also would benefit from strategies to help them to develop their resilience. The NCCA Guidelines (2007) state that "Exceptionally able young adults who may underachieve in college and later in adulthood come from this group" (p.42). Indeed, the NCCA Guidelines goes on to identify mentorships as well as college and career counselling as a means of school support that would be suitable for this group.

2.3.2 Type 2- The Challengings

Betts and Neihart suggest that this type of student is less recognisable as gifted because of their negative behaviour. These students struggle to have their abilities recognised and become frustrated when they are not. In class they are rebellious; challenging authority and often questioning their teacher in front of the rest of the class. These are children in the high risk category who may be in danger of dropping out of school or developing addictions or delinquent behaviour if appropriate interventions are not made. Again the NCCA guidelines suggest that mentorship would be useful with students who fall into this profile – this time emphasising the use of mentorship to build self-esteem. In a later section of this literature review, some key principles of positive psychology will be explored. One aim of the mentoring was to use positive psychology to help students' to develop more self-esteem.

The NCCA Draft Guidelines also state that schools should support these students' cognitive and social development (NCCA, 2007 p.45). Mentoring was identified as a beneficial way of doing this.

2.3.3   Type 3- The Undergrounds

The profile of the students that Betts and Neihart refer to as underground are as follows; typically females going through puberty, although males may also want to hide their ability. A typical underground female begins to deny their talent in the late primary and early post primary stage when the need to belong and feel included takes precedence. Same sex role models are recommended by the NCCA guidelines to help these students as well as continuing college and career education. As far as it was possible, male mentors were paired with male students, while female mentors were paired with female. We made a particular effort to ensure a same-sex mentor where we felt the student being mentored may fall into the underground category. (NCCA, 2007, p.47)

2.3.4 Type 4 - The Dropouts

Betts and Neihart argue that the dropouts are students who have a long history of underachievement and that they require substantial support from the system. The NCCA Guidelines claim that dropouts feel angry towards "adults and with themselves because the system has not met their needs for many years and they feel rejected" (NCCA Guidelines, 2007, p.48).Mentorship is again identified as one type of school support that would assist a students that fits this profile.

2.3.5 Type 5 -The Double Labelled

Betts and Neihart also highlight a selection of students whom they call The Double Labelled. These are exceptionally able students who may have a physical, emotional or learning difficulty which can cause their exceptional ability to remain unidentified. These students can feel emotions of powerlessness and may have low self-esteem. Mentoring would be useful for these students to give them the opportunity to express their emotions. Positive psychology strategies could be useful to help students to view themselves and their abilities in a positive light. The concept of the double labelled surprised many of the teachers involved in the project however the necessity of teachers being aware of all the labels- but this in particular- became apparent as the project progressed.

2.3.6 Type 6- The Autonomous Learner

Betts and Neihart describe this type of learner as being independent and self-directed. They claim that these types of students develop when appropriate educational programmes are provided for them. Again, however, the NCCA Guidelines claim that even these students would benefit from mentorships.

2.3.7 The Usefulness of Betts and Neihart's Profiles

These profiles of exceptionally able students are useful in so far as they help teachers to get an insight into the mind of the more able students with whom they are working. Teachers were encouraged to use the NCCA Guidelines as a reference tool when mentoring their students. The Guidelines suggest the best strategies for dealing with the students. The majority of students probably possess characteristics of many of the profiles. The NCCA guidelines offer advice on how to address the different needs of the students in the different profiles. This was seen as a useful tool by mentors.

The profiles are also useful in that they highlight the need for interventions for students with exceptionally ability. They help to dispel the myth that the NCCA Guidelines argue is prevalent among educationalists; that "exceptionally able learners are so clever they do well with or without special education provision" (NCCA, 2007, p.5). It was precisely because of our own experience of teachers espousing this myth that we moved away from the label of gifted and talented as outlined earlier.

The literature about mentoring and positive psychology reviewed below suggests that mentoring could be a beneficial intervention particularly when focussing on some of the central tenets of positive psychology. Rhodes and Du Bois (2008) point out the positive ways that mentoring can help in the social and emotional development of young people as well as their cognitive development. Seligman (2004) argues that we can develop resilience and enhance personal happiness through becoming aware of our strengths. The literature reviewed on gifted and talented education suggests that these are areas that gifted and talented students would benefit from being supported in. Mentoring and positive psychology will be explored in later sections of this chapter.

2.4 Reasons for Underachievement among Gifted and Talented Pupils

Deborah Eyre (2007) outlines the need for the right opportunities to be in place for gifted and talented young people to succeed. She also deems it equally as important that the individual student is confident and motivated enough to take advantage of these opportunities. In the Centre for Talented Youth conference in March, 2009 Eyre presented the audience with an

equation for optimum achievement for gifted and talented students. The equation is shown in Figure 1.

Figure 1:   Eyre's equation for optimum achievement (Eyre, 2009, CTYI Conference)

Eyre would contend that if all of the factors above are not in place then it is very likely that the gifted and talented pupil will underachieve. Reis and McCoach (2002) suggest that the underachievement of bright students occurs for one of three basic reasons.

Firstly gifted and talented pupils may underachieve when an apparent underachievement problem masks more serious physical, cognitive, or emotional issues such as learning disabilities, attention deficits, emotional disturbances, psychological disorders, or other health impairments. They support this perspective by making reference to other research in the area for example Busch and Nuttall, (1995); Gallagher, (1991); Lupart and Pyryt, (1996) and Silverman, (1991). In this case, Reis and McCoach tell us that the treatment of academic underachievement should be secondary to the treatment of the primary disorder. A second reason they put forward is that the underachievement is symptomatic of a mismatch between the student and his or her school environment. They look to Emerick, (1992) and Siegle, (2000) to support their argument in this instance. The final reason they put forward is that the underachievement results from a personal characteristic such as low self-motivation, low self-regulation, or low self-efficacy. McCoach and Siegle, (2001); Reis and McCoach, (2000); Siegle, (2000) and Whitmore, (1980) have all published work supporting this point of view.

The first reason, outlined above, is an interesting one and pertains to the notion of dual exceptionality or as Betts and Neihart (1988) deem them The Double-Labelled. The teachers involved in the mentoring have been made aware of dual exceptionality, through the use of Betts and Neiharts profiles and the need to be vigilant around this has been highlighted to them. None of the students participating in the mentoring project established in St. Mary's had been identified as possessing a special educational need. At the end of the mentoring process however, one student had been assessed for dyspraxia and mild autism on the recommendation of his mentor. This will be examined further in the findings section.

 The second reason outlined above is also identified by McCoach and Siegle (2005) who claim that in order for gifted children to succeed, they "must view their environment as friendly and likely to provide positive outcomes for them" (2005, p.25). One of the initial aims of the mentoring project was that through the process the students involved might feel more positively towards their school environment. Ford et al (1996) suggest that many gifted underachievers express a lack of interest in school curricula because they find it uninteresting, meaningless, or irrelevant. Foster and Matthews (2005) suggest two key areas in the motivation of gifted and talented pupils- matching the task to the child's ability and making learning relevant to the individuals engaged in the process.

Ford et al (1996) echo the third point made above when they cite the US National Commission on Excellence in Education (1983) and Whitmore (1986) who suggest that in America national estimates are that 20–50% of gifted students in America underachieve academically. They go on to argue that while poor motivation cannot fully account for these figures, they still believe that it plays a major role. McCoach and Siegle (2005) argue that "Some students are not motivated to achieve in school because they do not value the outcomes of school" (2005, p.5). One challenge for the mentors was, therefore, to tackle the

issue of motivation with the pupils through enabling them to view what they do in school as meaningful. McCoach and Siegle (2005) distinguish between intrinsic and extrinsic motivation and put forward suggestions for addressing pupils' lack of self-efficacy and self-discipline. These will be used to inform the mentoring process and will be outlined below.

2.4.1 Motivation- Intrinsic or Extrinsic?

McCoach and Siegle (2005) differentiate between intrinsic and extrinsic motivation. They claim that "External Motivation involves the drive to receive a reward or positive reinforcement that is external to the product itself" (2005, p.23). External motivation can be offered to students in terms of a financial reward for obtaining a certain grade on a paper or even in terms of the type of praise used by a teacher. If the teacher praises the student for good work and does not the work itself, praise can often become a motivating factor i.e. the student does a piece of good work so they will obtain praise not for the satisfaction of completing the work itself.

 McCoach and Siegle cite Wigfield (1994) when they suggest that "intrinsic value often results from the enjoyment participation often produces for the participant" (p.23). This is different from extrinsic motivation in that the student is engaging in work because of the satisfaction gleaned from their involvement in that work as opposed to any extrinsically motivating factors such as a reward. McCoach and Siegle suggest that intrinsic motivation is more likely to bring a pupil to work at his or her potential and that an absence of intrinsic motivation could lead to under achievement. Furthermore if a child gets used to extrinsically motivating factors such as praise, they are less likely to take risks in learning as they will not want to fail.

2.4.2 Self-efficacy

A lack of self-efficacy is also suggested as a reason why gifted and talented pupils might underachieve. Students' perceptions about their own skills influence the types of activities they select, how much they challenge themselves at those activities, and the persistence they exhibit once they are involved (Ames, 1990; Bandura, 1986; Schunk, 1981).

Although some research has shown that gifted students hold higher academic self-perceptions than their less-able peers (Dai, Moon, and Feldhusen, 1998), much of the research literature on gifted underachievers suggests that they demonstrate low self-efficacy or poor self-concepts (Reis and McCoach, 2000; Supplee, 1990; Whitmore, 1980). McCoach and Siegle (2005) point to the importance of self-efficacy when they tell us that "students must believe they are capable in mathematics before they will attempt to solve a difficult Maths problem" (McCoach and Siegle 2005, p.24).

For those who suffer from low self-efficacy, Siegle (2000) suggested the following strategies to increase it. Students who have been successful in the past are more likely to believe they will be successful in the future. This is supported by McCoach and Siegle (2005) who claim "Success breeds success. Students' beliefs about how well the can perform, are first and foremost influenced by how well they have performed in the past" (2005, p. 24). To develop self-efficacy in students, educators and parents can help them recognise their successes and growth in specific areas.

According to Schunk (1989) rewards can also increase students' self-efficacy when they are tied to specific accomplishments. Furthermore he suggests that when teachers give students opportunities to revise their work, they promote efficacious behaviour. Students often view exams and projects as static portraits of their abilities at one point in time, instead of seeing

the assignments as part of a learning process. Students need to appreciate that any project, no matter how well executed, can be enhanced with revisions and that a first attempt, even if beset with errors, can be improved. Again, this provided food for thought for the mentoring project. In a system that focuses fully on summative assessment, a challenge for the teachers was to move students beyond that and to encourage them to consider drafting and correcting their own mistakes.

Schunk (1989) also suggests that keeping examples of students' work to demonstrate how much they have improved can also develop self-efficacy. This is also endorsed by Siegle and McCoach who suggest that teachers "keep samples of previous academic work and periodically review students' earlier work with them to show growth and improvement" (2005, p. 24). Again, this was a strategy that was suggested to mentors.

The literature has suggested clear reasons my students who possess academic ability might underachieve. The first step in this research is to ascertain whether these reasons pertain to the selection of students in this study. Following this, these reasons will need to be addressed in the mentoring sessions. The use of positive psychology and metacognition will be explored to see if they do in fact address these needs.

2.5 Positive Psychology

The principal of St. Mary's recently decided to adopt much of the findings of positive psychology theory in the day to day running of the school. I believe the mentoring project fits into the new positive ethos of the school and have used much of what I learnt in researching this area in the creation of the mentoring handbook. I also found that there is also an overlap

in the theory related to positive psychology and the theory related to mentoring as will be outlined below. In this section, an outline of positive psychology is presented and how it can be used in the mentoring process to address the reasons why gifted and talented pupils may underachieve. Finally I have explored and addressed some of the criticisms levelled at positive psychology.

2.5.1 What is Positive Psychology?

Positive psychology is a recent branch of psychology whose purpose was summed up in 2000 by Martin Seligman and Mihaly Csikszentmihalyi:

> We believe that a psychology of positive human functioning will arise that achieves a scientific understanding and effective interventions to build thriving in individuals, families, and communities." (Seligman and Csikszentmihaly, 2000, p.5).

Traditionally, psychology was mainly concerned with all that ails the human mind - anxiety, depression, neurosis, and the treatment of disorders and deficits. The central concern for practitioners was to treat patients and bring them from a negative to a neutral state. Seligman, who is considered the leader in the field of positive psychology, borrowed the term 'positive psychology' from Maslow (1954) and as such was not a new idea when Seligman reintroduced it in the late 1990s. In his book "Motivation and Psychology" published in 1954, Maslow criticised psychologists for focussing on mental illness as opposed to mental health.

> The science of psychology has been far more successful on the negative than on the positive side. It has revealed to us much about man's shortcomings, his illness, his sins, but little about his potentialities, his virtues, his achievable aspirations, or his full

psychological height. It is as if psychology has voluntarily restricted itself to only half

its rightful jurisdiction, than the darker, meaner half (Maslow, 1954, p.354).

Seligman echoed Maslow's sentiments years later claiming that clinical psychology "has

been consumed by a single topic only - mental illness" (Seligman, 2002, p.xi). He urged

psychologist to continue the earlier missions of psychology of nurturing talent and improving

normal life. I, therefore, feel that the mentoring project as its aim is to help students to reach

their potential is in-keeping with the principles of positive psychology.

Positive psychology focuses on developing resilience in people through exploring how we

can address and prevent human suffering through building strengths. By building strengths

we can prevent a wide range of difficulties within individuals, families and whole

communities. Masten (2001) argues that strengths function as a buffer against adversity and

against psychological disorders, and they may also be the key to resilience. Fredrickson

(2003) argues that positive emotion can undo negative emotion, and also combats and

reduces the risk of physical illness. A key characteristic of many students is that they lack

resilience and this can often be particularly true for more-able students as was outlined in

Betts and Neihart's (1988) profiles. Furthermore, many students are unaware of or lack

confidence in their own strengths. Therefore, one of the main aims of the mentoring project

will be to try to develop students' resilience through a greater awareness of their strengths.

This could be achieved by focussing on Dweck's (2006) fixed and growth mindsets as will be

outlined below.

2.5.2 Positive Psychology and the Mentoring Process

In his writing on positive psychology, Seligman (2002) identifies the key components of happiness. The first aspect he identifies is relationships. Positive relationships with family and friends are key components of happiness. As has already been outlined, some more able students struggle to develop positive relationships with their peers. The mentoring process aimed to provide the students with a positive relationship with an influential adult but it was also hoped that through the mentoring process and the work done with the students, they would be able to develop other more positive relationships where they were lacking in their lives.

Another key ingredient to happiness as outlined by Seligman (2002) is engaging in satisfying and fun activities and understanding and being able to use your signature strengths. Clearly, many of these students are not engaging in satisfying learning activities in school and the mentoring aimed to focus on changing this through getting students to look at learning in a new way using the theories of scaffolding, zone of proximal development and fixed and growth mindset theories (Dweck, 2006).

Csikszentmihaly (1990) researched the concept of flow; a key concept in positive psychology. Flow, or a state of absorption in one's work, is characterized by intense concentration, loss of self-awareness, a feeling of being perfectly challenged and a sense that 'time is flying.' Flow is an intrinsically rewarding experience, and it can also help one achieve a goal or improve skills (Csikszentmihaly, 1990). The concept of flow compliments Ben-Shahar's (2007) concept of stretch zones as will be outlined later when examining the structure of the mentoring sessions. In-keeping with concept of flow, Tal Ben-Shahar

suggests that students working within their stretch zones would not only be academically fulfilled but could also potentially be happier. The benefits of getting pupils to work in their stretch zones will be further outlined below.

Duckworth et al. argue that the skills that promote resilience and increase positive emotion can be taught. They claim that many teachers are using the science of positive psychology in their classes, both implicitly and explicitly and schools are seeing the benefits in terms of lower rates of depression, fewer behaviour problems and improvements in learning and wellbeing (Duckworth et al., 2009). The mentoring programme therefore took some of its influence from the practical strategies for teaching positive psychology as outlined by Seligman (1998, 2002, 2004 and 2009) and Csikszentmihaly (1990, 1994, 1996, 1998, 2002) paying particular attention to the areas where we found an overlap between mentoring and positive psychology theory. It also sought to address the issues that Reiss and McCoach (2002) considered to be the principle reasons why gifted and talented pupils underachieve.

Particular attention was paid to Duckworth and Seligman's paper: "Self-discipline outdoes IQ in predicting academic performance of adolescents" (2005). This was a longitudinal study of one hundred and forty eighth grade students in the US. Also, Seligman et al's " The positive perspective on youth development" (2005) was considered carefully. These are both scientifically conducted research projects that have found real positive benefits of using positive psychology strategies with young people. The findings of these papers have been crucial in the creation of the mentoring handbook that teachers used as a guide as to how to structure the mentoring sessions (Appendix N).

2.5.3 Criticisms of Positive Psychology

One of the main criticisms levelled at the positive psychololgy is the perceived lack of scientific research supporting its claims. In her book "Bright Sided" (2010) Barbara Ehrenreich criticises Seligman's "Authentic Happiness" (2002) claiming that "Like most lay books on positive thinking, it's a jumble of anecdotes…references to philosophers and religious texts, and tests you can take to assess your progress toward a happier and healthier mind-set." (p.153) Louisa Jewell (2010) counter argues Ehrenreich's claims on the positive psychology news website claiming that "Most notably, Seligman refers to more than 250 psychological scientific studies in his book, more than one study per page of text" (Jewell, 2010). I feel that Ehrenreich's claims are only relevant in a study making claims about positive psychology and its potential effects on life expectancy or health in general. This study does not set out to prove Fredrickson (2003) right that happiness can reduce the risk of physical illness.

For this project, some of the principles of positive psychology will be used to help students to develop positive attitudes to study and work ethic. In order to justify this approach, I have read extensively the writings of Seligman (1998, 2002, 2004, 2010), Csikszentmihaly (1990, 1994, 1996, 1998, 2002) and Ben Shahar (2007, 2009, 2010) and have found these publications to be rigorously researched and to, above all, make sense. The main findings have been outlined in the section on positive psychology above. Furthermore, the overlap between much of the findings of the positive psychology research and researchers into mentoring, gifted and talented education and metacognition further convinces me of its validity as a form of intervention. Therefore, I thoroughly disagree with Ehrenreich and her claims that positive psychology is under researched.

Held (2004) raised issues with the simplistic approach taken by some psychologists in the application of positive psychology. A 'one size fits all' approach is not seen by Held to be beneficial to the advancement of the field of positive psychology, and she suggested a need for individual differences to be incorporated into its application. I totally agree with Held and that is why the teachers in the mentoring programme will be given training in the strategies of positive psychology but will be given the freedom to tailor their delivery of these strategies to the needs of the students they are mentoring.

Miller (2008) further criticises positive psychology claiming that instead of demonstrating that positive attitudes explain achievement, success, well-being and happiness, positive psychology merely associates mental health with a particular personality type: a cheerful, outgoing, goal-driven, status-seeking extravert. It will be interesting in the course of the research to discover if there is any merit in Miller's argument as this study intends to use the mentoring to explicitly teach certain qualities that Miller might suggest are part of a particular personality type.

2.6 Metacognition

In the past 30 years a sustained programme of research has focussed on metacognition and some of the positive impacts that it can have for a learner have been documented. McElwee (2009) tells us that "The simplest definition of metacognition is just "thinking about thinking" - a notion that disguises much more complicated concepts that have kept scientists, philosophers, and educators puzzling for hundreds of years" (p.5). Garner (1987) clarifies the difference between cognition and metacognition by explaining that while cognitive abilities are necessary to perform tasks, metacognitive skills allow us to assess how the task was

performed. McElwee goes on to further unpack the notion telling us that "The umbrella term "metacognition" can be divided into two separate, but interrelated parts: Metacognitive Knowledge and Self-regulation" (2009, p.6). She relates metacognition to the exceptionally able learner when she says:

> Exceptionally able pupils generally have higher levels of metacognitive knowledge than other children – they are more aware of constraints on their learning such as memory limitations and attentional distractions, and they can think of more learning strategies to apply at any given time. However, research findings regarding self-regulation are more mixed, and it appears that exceptionally able pupils do not necessarily excel in this regard (2009 p.6).

This idea is supported by Steiner and Carr (2003) in their research on the cognitive functions of gifted children.

McElwee (2009) goes so far as to suggest that poor self- reflection and regulation skills might be one of the primary reasons why exceptionally able students might underachieve:

> One of the cognitive advantages that almost all pupils who are identified as exceptionally able possess is a large working memory capacity. This often allows them to take shortcuts when it comes to planning, as they can keep more information in their heads. Further, the frequent high grades achieved by exceptionally able pupils can mean that they don't see the need for self-reflection and evaluation of work. In the senior years of secondary school however, when work becomes more demanding and perfect grades may no longer be so readily achievable, able students can experience a blow to their confidence and may be unwilling to push themselves for further challenges if they think they can't succeed. Training in metacognitive skills such as

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monitoring and self-reflection are important for exceptionally able pupils in this respect" (2009, p.19).

I found Mc Elwee's document to be extremely convincing and her strategies to be practical and teacher friendly. The metacognition document was shared with all the mentors and they were all invited to hear McElwee speak on the topic when she spoke at the school as part of the SESS 'Equality of Challenge Initiative'.

Table 1: Summary of strategies linked with potential reasons why more-able students may underachieve

Reasons for student underachievement	Strategies to overcome these
Mismatch between school and environment	Make school meaningful- career investigation Target setting Developing positive relationships
Lack of motivation	Growth mindset development. Career investigation. Metacognitive strategies (SQ4R/ Mind mapping)
Low self-efficacy	Strengths identification Visualisation Stretch zones and growth mindset
Poor self-discipline	Metacognition Target setting

2.6.1 Linking the literature and practice

The literature surrounding 'more-able students' outlines reasons why more-able students might underachieve. This study seeks to ascertain whether or not some of these reasons could be addressed through using positive psychology and mentoring. Table 1 demonstrates the approaches that may be used to address the different reasons for underachievement.

2.7 Mentoring

Newburn and Shiner (2005) trace the notion of mentoring back to the Ancient Greeks. They tell us that according to Homer, Mentor was the name of the friend chosen by Odysseus to act as guardian and tutor to his only son Telemachus (Newburn and Shiner, 2005, p.45).
The literature surrounding the concept of mentoring outlines two different, although not mutually exclusive, types of mentoring. There is naturally occurring mentoring in the Homeric style and then there is a more formalised and organised style of mentoring (Freedman, 1993, p.176) which takes its inspiration from the naturally occurring mentoring. Natural or informal mentoring, along the lines of this classical Homeric version, is generally thought of as a relationship "between an older, more experienced mentor and an unrelated young protégé" where the mentor provides "on-going guidance instruction and encouragement aimed at developing the competence and character of the protégé" (Rhodes 1994, p.189). This sort of mentoring is naturally occurring in that it has not been set up or pre-arranged and the mentor is not following a specific mentoring programme. Darling et al (2002) tell us that these naturally occurring mentoring relationships occur the world over in a very broad range of settings and circumstances though only a minority of such activities would be given the actual title of mentoring.

Freedman (1993) describes a more structured and formalised approach to mentoring. He claims it is:

> a relationship between two strangers, instigated by a third party, who intentionally matches the mentor with the mentee according to the needs of the younger person as part of a planned intervention programme (Freedman, 1993, p.176).

Newburn and Shiner (2005) argue that this model of mentoring may be "informed by the same principles as naturally occurring mentoring" (Newburn and Shiner, 2005, p.46) but that it operates in different circumstances and settings. They claim that in these more formal mentoring relationships the mentoring is designed as "an intervention with young people who for varying reasons are perceived to require some form of guidance, direction and/ or support above and beyond that they are already receiving" (Newburn and Shiner, 2005, p.46). The mentoring that will take place for the purpose of this project will Freedman's the more formal model of mentoring and the structure it will take has been rooted in the literature surrounding the area of youth mentoring.

Having looked at a variety of literature regarding mentoring in a variety of settings, I have identified three key components necessary for a successful mentoring relationship; i) the relationship between the mentor and the mentee, ii) the qualities of the mentor and iii) the importance of structuring the mentoring sessions. Each of these areas will be examined below. In addition to this I will examine the potential benefits for the students in participating in a mentoring programme.

2.7.1 The Relationship between the Mentor and the Mentee

Much of the literature reviewed suggested the relationship between the mentor and the

mentee is crucial if the mentoring is to be successful. Jean E. Rhodes and David L. DuBois

(2008) emphasise the need for mentoring to be focussed around a caring relationship between

the adolescent and the mentor. Burke (1991) also emphasised the importance of the

relationship between the mentor and the mentee and how vital it is that this relationship is a

collaborative one. Anderson and Shannon (1988) believe that mentoring functions best within

the context of an "on-going, caring, informal and interactive relationship" (1988, p.40)

between the mentor and the mentee.

In the article "Mentoring Relationships and Programs for Youth" (2008), Rhodes and DuBois

further unpack the notion of this caring relationship arguing that the most effective mentoring

occurs "when mentor and youth forge a strong connection that is characterized by mutuality,

trust and empathy. For this bond to be achieved mentor and youth need to spend time

together on a consistent basis over some significant period of time" (Rhodes and DuBois

2008, p.255). Newburn and Shiner's (2005, p.131-132) findings further support the ideas

outlined above. They outline five features for successful mentoring relationships.

Firstly, the mentee needed to feel like they were able to talk to their mentor. Secondly the

mentees demanded a level of reciprocity from their mentor i.e. that their mentor gave

something of him or herself in the process. Thirdly, they found that successful mentoring

relationships were built on respect rather than authority. Fourthly, "it was absolutely vital that

that the mentors were, and were perceived to be, understanding and interested in young

people" (Newburn and Shiner, 2005, p.132). The final aspect identified was that the mentee

felt as though he or she was having fun. I feel that the five points outlined by Newburn and

Shiner above are the key aspects to achieving what Rhodes and Du Bois entitle a caring relationship. It was clear that in order to cultivate such a positive relationship with the students they would mentor, the mentors needed to possess certain qualities. These will be explored below.

Newburn and Shiner also warn us that mentoring relationships as "inherently fragile" (2005, p.138) as once the relationship has begun, it is relatively easy for one side to become disenchanted or disappointed because of misunderstandings that could occur. This information was shared with the mentors at the outset of the process so that they would approach the process in the right manner. In order to maintain this fragile relationship it was important that the mentors possessed the right qualities. The qualities that the mentors needed to demonstrate are outlined below.

2.7.2 Qualities of Effective Mentors

Many authors have included sections on the importance of the mentor's skill base. Tomlinson (1995) viewed a mentor as a coach who challenges and stimulates but also as a facilitator who supports. This idea is consistent with that of Yoemans and Sampson (1994) whose work focussed on teachers mentoring other teachers. Also as outlined above, Newburn and Shiner point out that the mentee's themselves identify the need for the mentors to be understanding towards and genuinely interested in young people.

Meier (2006) and Clayton (2009) suggest that schemes which recruit people who have already had experience of, and success in, helping roles are more likely to build positive relationships with mentees. Rhodes and Dubois, (2006) and Clayton, (2009) also emphasise the importance of being able to model positive behaviours for the mentee. Further findings in

a document published by the Youth Justice Board in Britain (2005) found that overall,
female mentors achieved more successful outcomes than male mentors with both female and
male mentees and that female mentors matched with female mentees were especially
successful. The same evaluation also found that ethnicity could affect mentoring outcomes.
Newburn and Shiner (2006) and Dubois et al (2002), however, contradict this claiming that
matching partners based on ethnicity, race or gender have had no significant effects on the
quality of relationships but that matching according to similar interests and personalities
produced more effective results. For the purpose of this research, I decided to put my faith in
the findings of Newburn and Shiner and to make an effort to match mentors to mentees of
similar interests. If a child had a particular interest or strength in Science every effort was
made to match the student to a Science teacher. Similarly if the student was known to be
particularly keen on sport, a teacher with a similar interest was found. Obviously this was not
possible in all cases but where possible it was done. I chose to be guided by the findings of
Newburn and Shiner (2005) in this case because the purpose of this project was to get
students to change their attitudes to learning and to start to realise their academic potential. I
felt that it made sense that young people would be more likely to respond to this idea from
someone with whom they shared a similar interest.   However, I also deferred to Rhodes and
Spencer (2010) who found that gender does matter when it comes to mentoring and as far as
it is possible and practical to do so I matched mentors with mentees of the same gender.

I felt that the teachers who participated in this project fulfilled all of the main criteria outlined
in the literature. The teachers, who elected to participate in the mentoring programme in St.
Mary's, volunteered to do so in their own free time which I felt was indicative of the fact that
they had a genuine interest in the students' wellbeing. The teachers, in the main, opted to
work with students who they did not teach. This reason for this was to enable positive

relationships to develop between the mentor and the mentee as neither teacher nor student had preconceived ideas about each other at the start of the process. I felt the relationship would have a better chance of succeeding as one of respect as opposed to authority as the teacher would not have to discipline the student in a classroom setting and could therefore focus primarily on promoting a positive relationship as outlined above.

In-keeping with what Meier (2006) and Clayton (2009) deem to be important, as teachers the mentors already had experience of and success in building positive relationships with young people. Furthermore they have experience daily in modelling positive behaviour for young people as was highlighted by Rhodes and Dubois, (2006) and Clayton, (2009).

Fulfilling Rhodes and Du bois (2008) criterion that the mentor needs to spend time with the mentee on a consistent basis over some significant period of time was the most difficult aspect for the mentors. The teachers were not be able to see the student on a weekly or fortnightly basis as this was not be practical in a school as busy or large as St. Mary's. Also as these students are exam students, they could not miss classes that regularly without it having a negative impact on their Junior Certificate Exams and thus defeating the purpose of the whole exercise. The fact that they would not see each other on such a regular basis could certainly have impacted on the development of a relationship. When this point was discussed with the mentors, they suggested that they would be keeping an informal eye on the students around the school and would engage with them when they saw them in the corridors as well as in their one to one mentoring sessions therefore building up a strong, informal relationship. Furthermore all the teachers involved felt that they would be able to develop a strong and positive relationship with the student in the time that they would spend with them.

2.7.3 Structure

As this form of mentoring is following Freedman's more structured interventionist approach, the structure of the mentoring sessions was important. Rhodes and Du Bois (2006) emphasise research conducted by Langhout, Rhodes and Osborne (2004) which found that outcomes were most favourable when youth experienced not only support but also some degree of structure in their relationships with mentors. Britner (2006) refers to a mentoring model created by Larose and Tarabulasy (2005) which emphasises the need for:

> mentors to provide the guidance and information necessary to enable their protégé to be self-determined. This includes clearly stating expectations they have for them and their importance as well as the consequences of meeting versus not meeting these expectations (Larose and Tarabulasy, 2005, cited in Britner, 2006, p.204).

Kajs et al. (2001) who looked at mentoring in educational settings and stressed the importance of mentors and mentees understanding each other's roles and expectations from the outset. Mentors were encouraged to set out the expectations they had for the mentee from the outset. One of the first activities that mentors were encouraged to engage in was target setting with the students they were mentoring. Students were be expected to set Specific, Measurable, Achievable and Time Related (SMART) Targets in every mentoring session and these targets were be reviewed at every new session.

I think it is important therefore that in keeping with the findings of Rhodes and DuBois and of Brintner, the mentors, as part of this research were be given a structure for their mentoring session. This was a suggested structure which took the form of the mentoring handbook (Appendix N)**.** The content of this booklet was negotiated with the group of teachers initially taking on board suggestions made by them and was subject to change based on their

experiences throughout the process. In this way the mentoring handbook became what Star and Greisemer (1989) would call a boundary object. This is in-keeping with the distributed leadership and communities of practice models that are outlined below in the leadership section of this literature review. The various activities for the mentoring were adapted from Seligman's findings on positive psychology, the literature surrounding gifted and talented students as well as the Special Education Support Service's publication "Metacognition for the classroom and beyond: Differentiation and support for learners" (2009).

The individual nature of each student and their needs was also be taken into account, however, and the mentors were given the freedom to tailor the mentoring session to meet the specific needs of the student they were mentoring and were not be expected to stick rigidly to the suggested structure. The teachers were professionals who were used to working with young people and consequently were given freedom to use their professional discretion when using the mentoring handbook. The building of a relationship with their mentee was considered to be of paramount importance and they were given suggestions as to how this can be done. They were also be made aware, however, of the importance of adopting a structured approach to the mentoring and were encouraged to give the students a clear idea of the expectations they had for them at the outset of the process

2.8 Mentoring: Benefits for Adolescents

The model of mentoring outlined by Rhodes and Du Bois (2008) argued that well established mentoring relationships may contribute to positive youth outcomes through three interacting developmental processes: social emotional, cognitive, and identity-related. Reference is made to studies such as those conducted by Du Bois and Silverthorn (2005) and by Du Bois,

Holloway, Valentine and Cooper (2002) which they argue in favour of the benefits of

mentoring interventions for young people. The three areas are outlined below.

2.8.1 Social and Emotional Development

Rhodes (2005) argues that mentoring can help young people to grow both in terms of social

and emotional skills. **"The relationship may provide the youth with opportunities for fun and

escape from the daily stresses"** (Rhodes, 2005, p.692). Mentoring can also provide what

Rhodes terms a corrective experience. Positive mentoring relationships can prove to young

people that positive relationships are possible with adults thus challenging both their views of

themselves and of adults. Rhodes refers to Bowlby's (1998) attachment theory claiming that a

child seeks comfort and protection from caregivers. If this is not available at home, they will

seek/ obtain it from the mentor. For those who have primary caregivers, the mentor may act

as a secondary attachment figure (Bowlby, 1998, cited in Rhodes, 2005).

The National Council for Curriculum and Assessment's Guidelines for teachers of

exceptionally able students (NCCA, 2007) highlights a variety of different social and

emotional needs that students with exceptional ability may experience. These social and

emotional needs were identified using the profiles that were discussed in section 2.3 of this

chapter. The NCCA guidelines consistently suggested mentoring as a means of addressing

the needs of these pupils.

2.8.2 Cognitive Development

Most of the research seems to focus on cognitive development as a by-product of the

mentoring process; Rhodes and DuBois (2008) suggest that through the process of

engagement with a mentor the mentee's social capital will naturally develop. However, this

study also focussed on mentoring students towards both the development of their social capital as a natural by-product of the mentoring process as well as challenging the students' attitudes towards their cognitive abilities and getting them to reflect on their thinking processes in new ways.

Rhodes and Du Bois (2008) argue here that the mentor may introduce new experiences that broaden youth's horizons. Here they refer to Vygotsky's (1978) zone of proximal development (ZPD); this is the range between what a person can attain when problem solving independently and what he or she can accomplish when working under guidance. Initial research for the project indicated that many more able students were under achieving because they did not feel sufficiently challenged in the classroom environment. They were working very much within their comfort zone and not receiving enough guidance with regards to how to develop their potential. The hope in the case of this mentoring project would therefore be that interactions with a mentor would occur within this zone of challenging but attainable pursuits and thus the mental capacities of the youth may improve. An effort was made to assist this by a process called scaffolding.

Sociocultural theorists such as Jerome Bruner (1956) have applied Vygotsky's ZPD to educational contexts. The resulting theory was called scaffolding. Scaffolding is a process through which a teacher or more competent peer gives aid to the students in her/his ZPD as necessary and tapers off this aid when it becomes unnecessary. It was hoped, therefore, that through scaffolding the mentor would encourage a more advanced thought process.
It was also hoped that the interpersonal quality of mentoring could contribute further to the youth's acquisition of thinking skills. Research from educational literature, such as that outlined by Vygotsky above, underscores the social nature of learning. Constructivist

scholars agree with this and emphasise that individuals make meanings through the interactions with each other and with the environment they live in. Knowledge is thus a product of humans and is socially and culturally constructed (Ernest, 1991 and Prawat and Floden, 1994). McMahon (1997) agrees that learning is a social process. He further states that learning is not a process that only takes place inside our minds, nor is it a passive development of our behaviours that is shaped by external forces and that meaningful learning occurs when individuals are engaged in social activities. Research suggests that the most effectively engaging adults are not overly directive, but rather are responsive and provide an appropriate balance of structure, challenge, enjoyment and support (Csikszentmihalyi and Rathunde, 1998, p.695).

Getting students to consider their own attitudes to their learning, through the use of the SESS document "Metacognition for the classroom and beyond; Differentiation and support for Learners" (McElwee, 2009) also formed a significant part of the mentoring process and it was hoped that this would help to develop the students' cognitive abilities through firstly challenging their beliefs about their learning and secondly providing them with strategies to structure and regulate their own thinking.

According to Dweck (2006) all children develop beliefs about their own intelligence and abilities. Some children think of their intelligence as fixed, or carved in stone and incapable of change. Dweck (2006) calls this a fixed mindset. Individuals with a fixed mindset attribute success or failure to their innate ability rather than effort -if they encounter failure or difficulty, they think they lack ability, they see no point in trying harder and become discouraged and helpless. Students with a fixed mindset become excessively concerned with

how smart they are seeking tasks which will prove their intelligence and avoiding those that might not. The desire to learn then takes a back seat (Dweck, 2006, p.6-7).

In contrast, other children think of intelligence as something which is open to change as they learn and master new things. This is what Dweck calls a growth mindset. These individuals see the world as full of opportunities to learn and grow and if they encounter challenges, they increase their efforts or try a new problem-solving strategy. They persevere in the face of setbacks and are fuelled by a desire for mastery. "The passion for stretching yourself and sticking to it even (or especially) when it's not going well is the hallmark of the growth mind-set" (Dweck, 2006, p.7). When students believe that it is possible to develop their intelligence, they focus on doing just that; rather than worrying about looking smart; they take on challenges and stick to them. One of the aims of the mentoring will be, therefore, to try to get the students to view their cognitive abilities with a growth mindset.

Challenge is an important factor in helping more able students to feel motivated to achieve. Fear of failure inhibits motivation. Fear of failure occurs, according to Dweck, when students possess a fixed mindset towards their learning. The psychologist Tal Ben - Shahar (2007) developed the concept of 'stretch zones' - those learning spaces that involve tolerating a certain amount of fear and uncertainty. Stepping into the stretch zone involves the exercise of courage and the risk of failure. It can be linked to the notion of resilience which will be explored in the section on positive psychology below. In order to step into the stretch zones, students need to have a growth mindset with regards to their learning.

In order to get students to work develop a growth mindset and to work in their stretch zones as outlined above, we needed to communicate to the students we mentored that failure or not

being perfect is normal, expected, and even welcome - it is an opportunity for deeper learning and an indication that they have extended themselves. It is not failure that is the problem, but rather the habit of giving up and retreating to our comfort zones (Fox-Eades, 2008). We hoped to get the students to see failure as something they could share with teachers and something which can be solved together with their teacher. Of course, for a more able student what they perceive as failure may not be the same as what a student of less ability considered to be failure. Discussing the fixed and growth mindsets, as well as the three learning zones, ('comfort', 'stretch' and 'panic') with the individual student gave them a language to communicate feelings about learning. We hoped that this would help them to understand the learning process and that failure in itself is not a bad thing and that this hopefully would give the students the confidence to try again as opposed to giving up. The idea of sharing this concept with students and the notion that underpins it- that we can change the way students think about learning are also aspects of the positive psychology ideology that is outlined in a later section.

The mentoring also focused on using metacognition to get the students to reflect on their cognitive processes. This has been outlined in an earlier chapter. The development of metacognitive awareness compliments the development of Dweck's (2006) growth mindset. By showing a learner that they can be in control of how they study, how they organise their work, and how they reflect upon it, we encourage them to take responsibility for learning and demonstrate that it is an active process which in turn reduces the mystery that some pupils imagine shrouds the learning process. The self-regulatory skills of planning, monitoring and evaluating are crucial for the student if they are to experience learning in the holistic manner intended in the learning cycle.

Engagement with metacognitive learning techniques encourages pupils to see learning as a process, and one in which they can have input. The learner is at the centre of the activity, directing it, rather than standing on the side-lines. Ideally in this way, pupils begin to see how they can take control of their own learning and be agents of their own success (McElwee, 2009, p.9).

Through sharing the ideas of stretch zones with the students as well as metacognitive strategies, this study aims to get students to reflect on their own thinking processes and to develop strategies to organise their learning more effectively and to essentially change how some of these children think about their learning. It also hoped that the social nature of the mentoring, the interactions with an adult who is offering guidance will play a part in developing the students' social capital. Furthermore, through the process of scaffolding it is hoped that it will be possible for the mentor to guide the students from their comfort zone to their stretch zones. It is therefore hoped that the mentoring will both explicitly and implicitly enhance each mentee's cognitive development.

2.8.3 Identity

The profiles of the gifted and talented students as outlined by the National Council for Curriculum and Assessment (NCCA, 2007) guidelines suggests that many gifted and talented young people have a negative sense of themselves and struggle with their identity. Through the development of Rhodes and Du Bois (2008) and Brintner's (2006) 'caring relationship' as outlined above, it is hoped that the mentors may help shift youth's current perception of both their current and future identity. Here Rhodes and Du Bois make reference to what Markus and Nurius (1986) referred to as their possible selves defined as the "individual's ideas of

what they might become, what they would like to become and what they fear becoming"

(Markus and Nurius, 1986 as cited in Rhodes and Du Bois, 2008, p. 256)

Harter (1988) contends that young people's determination of global self-worth stems not only from their self-evaluation of competence in activities they consider to be important but also on their perception of acceptance, support and regard from significant others. As the mentor's positive appraisal becomes incorporated in the mentee's sense of self, it may modify the way that the youth thinks that peers, parents and other adults see them. This should in turn impact positively on their identity. It was hoped that the mentoring process would encourage the young people involved to develop a more positive sense of self and this in turn would have an effect on their relationships with others as well as their own emotional development.

2.9 Criticisms of Mentoring Interventions

Newburn and Shiner (2005) warn us about creating situations where unrealistic expectations occur on the part of stakeholders and policy makers when structuring mentoring programmes. They claim that studies which focus on linear models of construction for mentoring programmes i.e. those that follow mentoring relationships from their inception through different stages to their eventual conclusion "oversimplify the nature of mentoring and tend to overstate the centrality of goal-focussed instrumental activities" (Newburn and Shiner, 2005, p.123). They go on to argue that:

> by idealizing mentoring in this way such models assume that young people will move
> relatively quickly into activities that either challenge some aspect of their behaviour
> or remedy some deficit in their social functioning" (2005, p.123-124).

Newburn and Shiner argue that these models are over simplistic and that "they do not reflect the complexity and diversity of mentoring relationships and tend to underplay the relatively mundane nature of much mentoring activity" (2005, p.124). I believe that one way of combatting Newburn and Shiner's criticism is by sharing their findings with the mentors. By being prepared for the mundane nature of much of the mentoring process, the mentors can appreciate that it is "the mundane, humdrum stuff of basic human interaction which provided the staple diet for most mentoring relationships" (2005, p.125). Sharing this information will hopefully ensure that the mentors do not approach the process with unrealistic expectations and therefore do not become disenchanted if they find that progress is not as obvious as they hoped.

Another criticism of mentoring as an intervention is pointed out by Rhodes and Du Bois (2008) when they claim that compared to other intervention programmes, the effectiveness of mentoring programmes can be considered relatively small. They consider the reasons for this and conclude that:

> when all relationships are combined as in most of the analyses described above, notably more positive outcomes for some youth may be masked by neutral and even negative outcomes for youth involved in less effective mentoring relationships. For mentoring to fully realize its promise as a safe and effective intervention for young persons, programs will need to be informed by a deeper understanding of the processes that are at the root of these differences (2008, p.255).

Therefore, Rhodes and Du Bois argue that mentors who are ineffective may mask the benefits derived by young people who are being mentored effectively. The article argues that many interventions with young people entitle themselves as mentoring and that the term is used too

loosely. This idea is supported by Newburn and Shiner (2005) as well as Phillip (1999) and Clutterbuck (2002) all of whom identify one of the difficulties with mentoring and with assessing its value to be the difficulty of pinning down precisely what it means. "The problems of definition, and the absence of agreed theoretical models underpinning practice, complicate any attempt to assess the impact of such interventions" (Newburn and Shiner, 2005, p.47). In many ways this criticism is redundant when it comes to this study because we used specific approaches to mentoring a particular group of young people with the aim of measuring the success of that particular intervention as opposed to the effect of mentoring as a broad concept fulfilling a variety of functions in varying contexts. The teachers were committed to and informed about the process at the start and at regular intervals throughout.

A further criticism of mentoring as levied by Phillips (2005) and supported by Newburn and Shiner is that the expected outcomes from these interventions are often too high. This is in keeping with the findings of Phillip who says "mentoring appeared to offer the potential to tackle some of the massive problems facing inner city youth, educators and other professionals in the USA but within a highly localized, small-scale operation" (Phillip, 1999 p.25). As Newburn and Shiner put it "mentoring has come to be seen as the latest in a long line of silver bullets in relation to tackling youth crime" (Newburn and Shiner, 2005, p.46). This criticism again highlighted the need for the mentors getting involved in this research task to receive sufficient training in mentoring skills and to be willing to commit to the process. The mentors received grounding in the theory and research findings surrounding the topic. It was hoped that this level of awareness of issues surrounding the process would enable the mentors to enter the process with realistic expectations of what could be achieved therefore removing the risk of the mentors feeling disenchanted with the process. Furthermore, the mentors would have to impart some of this information to their mentees in

the mentoring sessions so that they too had realistic expectations of the process and did not become disenchanted with the process in its early stages.

2.10 Education Management Theory

St. Mary's is a large secondary school with over 80 teachers and approximately 1150 students. In such a large school, experience has shown that it is very difficult to establish and sustain such a project involving the whole staff at the initial stage. Efforts had been made to introduce initiatives to the whole staff in the past and these efforts had failed. Because of this, it was therefore decided to initially establish a small group in the school to work on the mentoring project and to share the findings with the whole staff over time. Lave and Wenger's (1991) concept of Communities of Practice was the inspiration for this. However, despite to collegial nature of the community of practice model, there was still the need for leadership within the community of practice to ensure that the goals of the project were met, to collate the material and to facilitate the meetings. Because the project was to be organised and run by me with the principal of the school acting in a supporting and facilitating role, a distributed leadership model was adopted as it seemed to complement the research surrounding communities of practice. Research surrounding communities of practice and distributed leadership will, therefore, be outlined in sections 2.11, 2.12 and 2.13 below.

2.11 Communities of Practice

Lave and Wenger (1991) developed the concept of communities of practice. This is the idea that learning involves a deepening process of participation in a small group where good practice can be shared. Spillane, Halverson and Diamond (2004) see communities of practice

as a means of balancing attention from day to day leadership with the broader situation. Spillane and Sherer define communities of practice as "groups of people who have mutual relationships on a joint enterprise" (Spillane and Sherer, 2004, p.9). Two key mechanisms critical to interactions among communities of practice are: boundary practices (Wenger 1998) and boundary objects (Wenger 1989).

2.11.1 Boundary Practices and Boundary Objects

A boundary practice is a routine that sustains connections between communities of practice and provides an on-going forum for mutual engagement. The management of St. Mary's support this form of practice by creating circumstances which facilitate the meeting of communities of practice within the school. In order to facilitate this project, the school provided the space for teachers to meet and offered a lunch for teachers who were willing to work through their lunch time. On occasion, they were also willing to organise substitute teachers to cover for teachers to allow them time to meet. This helped sustain the community and ensure on-going engagement with the process.

The term boundary object is attributed to Susan Leigh Star and James R Greisemer who used it to describe the function of tangible objects within and between communities of practice. The concept of boundary objects refer to objects that serve as an interface between different social worlds (Star and Greisemer, 1989, p.393). They are used to coordinate the perspectives and information needs of intersecting social worlds towards some purpose. They can therefore be seen as shared tools for solving problems across different contexts. Although Star and Greisemer were not referring to the world of educational research, I believe boundary objects to be applicable in this context also. Through the use of the boundary object, the different communities come to be articulated and coordinated. In the case of this

project, the boundary object was the mentoring handbook (Appendix N)**.** It served as a working document through which the various perspectives of the teachers involved, many of whom come from different departments within the school, were recorded. The mentoring handbook provoked conversation and initiated ideas. However boundary objects and practices alone were not enough to sustain the community of practice, leadership was also necessary to ensure that the group remains focussed on the task in hand.

2.12 Distributed Leadership and Communities of Practice

Despite the fact of usefulness of communities of practice for problem solving and collective learning as outlined above, Swan et al (2002) see little in the literature surrounding communities of practice to offer insight concerning their manageability. Furthermore, they argue that there is not enough empirical research regarding the role of leaders in communities of practice. Wenger and Snyder (2000) acknowledge that there is a managerial paradox relating to communities of practice:

> In general, we have found that managers cannot mandate communities of practice; instead, successful managers bring the right people together, provide an infrastructure in which communities can thrive, and measure the communities' value in non-traditional ways (Wenger and Snyder, 2000, p.140).

However, McDermott and Archibald (2010) emphasized that "unlike the independent and self-organizing bodies we saw years ago....today's communities require real structure". Leadership is needed where structure is required. Phillips (2003) believes that a community of practice is led, normally, by an interior expert of its area of practice, this person is

influential in that it is he or she who attracts members and keeps them together; their leadership is both distributed and situational.

2.13 Distributed Leadership

Peter Gronn (2002) makes an effort to develop a conceptual description of distributed leadership. He sees distributed leadership in education institutions as both participatory-involving many people- and focused in a small group of leaders, believing that it is seldom the prerogative of one leader acting alone in this environment. Gronn (2002) believes that distributed leadership is widespread across institutions in a variety of forms and that distributed leadership has especial significance in contemporary and information-rich work environments. Gronn (2002) also argues that there are organisational advantages to this model of leadership. He claims that it enables organisations to capitalise on a range of strengths, individuals to strengthen their skills and attributes and creates bonds between colleagues. These advantages amount to "an overall widening of the net of intelligence and organisational resourcefulness" (Gronn, 2002, p.37) which has applicability to schools and organisations. Spillane and Sherer (2004) argue that outcome in educational contexts cannot be attributed to one individual. The claim they make is that cognition is distributed situationally in the physical environment through the environment's material and cultural artefacts. Cognition is also distributed socially through other people in collaborative efforts to complete tasks.

Spillane (2005) cites Rogoff (1990) who claims that individual, interpersonal and cultural elements constitute each other and require three planes of analysis as opposed to levels of

analysis. When examining culture, Spillane and Shearer (2004) claim that there is a dual nature to culture in that it is both the medium and outcome of practice. This study, which is based on practice in St. Mary's School, will therefore examine the culture of communities of practice which are already in existence in the school and which can be added to by implementing distributed leadership ideas. The study will also explore the effect of the project on the individual and also how the collaboration of all members of the community of practice adds to the project.

2.13.1 A Framework for the Study of a Distributed Leadership Perspective.

Bennet et al (2003) conducted a review of current writing on distributed leadership for the National College for School Leadership. They identified the fact that there were disparate definitions for the term distributed leadership. They state "There are few clear definitions of distributed or devolved leadership and those that exist appear to differ from each other" (Bennet et al. 2003, p.6). In the article "A Distributed Perspective on School Leadership-Leadership as stretched over People and Place" Spillane and Sherer (2004) agree with Bennet et al's assertion that it is difficult to define distributed leadership because of how the term is used interchangeably with other terms such as collective leadership. Bennet et al do, however, put forward three distinctive elements of the concept of distributed leadership that set distributed leadership apart from other forms of leadership. These three elements are similar to the framework distributed leadership as outlined by both Spillane and Sherer (2004) and Spillane and Diamond (2007)

The first of element put forward by Bennet et al. they adapt from Gronn's theory (2002) the idea that leadership is "an emergent property of a group or network of interacting individuals" (Bennet et al, 2003, p.6). Here the emphasis is placed on leadership not from an

individual but from a group who work together to pool their initiative and expertise i.e. a community of practice. This is echoed by Spillane and Diamond (2007) who set out a framework for their investigation of distributed leadership. Their research reiterates that of Wenger and Snyder (2000) in that Spillane and Diamond's model of distributed leadership moves us beyond seeing leadership as synonymous with the work of the principal or head teacher and therefore involves recognition that the work of leadership involves multiple individuals including teacher leaders. Like Bennet et al, Spillane and Diamond in their book "Distributed Leadership in Practice" (2007) support Gronn's (2002) argument that we have to move away from the image of a heroic leader that continues to dominate the literature on school leadership.

> This distributed view of leadership shifts focus from school principals and other formal and informal leaders to the web of leaders, followers, and their situations that give form to leadership practice (Spillane and Diamond, 2007, p.7).

The second aspect identified in Bennet et al's article suggests that in a distributed leadership model there is an openness of boundaries of leadership. This means the net of traditional leadership can be widened. According to Spillane and Sherer (2004) a distributed leadership perspective urges us to focus on others in the school who by virtue of formal position or informal role take on leadership responsibilities. Most studies focus on just this aspect -the leader plus perspective. Spillane and Sherer, however, see the importance of exploring the complexities of leadership practice in more depth. Drawing on distributed cognition and activity theory, they suggest a model where leadership is distributed or stretched over three key elements; leaders, followers and situations. Spillane and Sherer call this leadership as practice. Practice is a coproduction of leaders, followers and situation. As a result of focussing attention on the interactions of multiple actors, Spillane and Diamond (2007) go on

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to argue that equal attention needs to be paid to the role of followers in this framework. It is therefore important to move the focus from one individual's experience. The experience of all the mentors, the senior management team as well as the students being mentored will all be recorded and explored in the course of this research.

Finally, the third aspect of distributed leadership is that "varieties of expertise are distributed across the many not the few" (Bennet et al., 2003, p.7). This aspect argues that initiatives may be set up by those with relevant skills in an area however others may then adapt it and improve it within a mutually trusting and supportive culture. Spillane and Diamond highlight the importance of organisational tools and routines, as critical aspects of the situation that serve to mediate the work of leaders and followers and to enable the expertise to be distributed. By situation, they refer to more than tangible, material aspects of the context but also the socio-cultural aspects that enable practice to occur. They claim in order to lead in schools; leaders must adapt their behaviours to the characteristics of their staff and the situation of the school.

The three aspects as identified by Bennet et al (2003) and supported and developed by Spillane and Sherer (2004) and Spillane and Diamond (2007) would be possible in the context of St. Mary's where the management is very supportive of groups of teachers meeting and pooling their initiative and expertise. Furthermore, the principal encourages these meeting as a means of internal Continuing Professional Development (CPD) in the school. There is an on-going open invitation to other members of staff to join these groups to up skill in particular areas. This invitation is extended at whole staff meetings which take place every term. The climate in St. Mary's would therefore be conducive to the three elements of a distributed leadership framework as outlined above.

Spillane (2006) continues to unpack the notion of distributed leadership claiming that leadership is stretched over leaders, followers and situation. From a distributive leadership perspective leadership is not something that is done to followers. Followers coproduce leadership practice with their interactions with leaders. Spillane and Sherer use transcripts of a literacy committee meeting in a school to demonstrate how leadership is stretched over leaders, followers and the situation.

They identify the leadership in the transcript as being an example of collaborated practice because the people- leaders and followers- have to work simultaneously with each other on the leadership activity. In a meeting situation there is a need for the leader to assume the role of leader. Spillane and Sherer use the transcript to outline this. They identify the importance of preparation as the leader in the transcript illustrates. They also suggest that the presence of the principal would help to affirm the role of the leader in the group.

Spillane and Sherer use the transcript to identify how leadership is stretched over the group when others are given the opportunity to share practice and participate. They show how praise and affirmation can be used to create a climate of trust but that this needs to be combined with an acknowledgement of what to do better. The benefits of sharing practice are outlined. As teachers share ideas they accomplish several things: they give other teachers ideas, they show the weaker teachers that these tasks are possible to do and they make the big picture ideas concrete and clear. The article supports this argument by comparing two transcripts. While the scope of their research in this paper is limited therefore, the transcripts prove to be a useful tool to highlight aspects of leadership and the workings of communities of practice.

2.14 Criticism of Distributed Leadership

Hatcher (2005) criticises the concept of distributed leadership claiming that it is contradictory to the government driven leadership agenda that exists in UK at present. He questions how authentic distributed leadership can be in schools where hierarchical power structures do exist. Although he writes about schools in a UK context, I think that Hatcher presents us with some interesting criticisms of distributed leadership which will be examined in this section. Structurally, I will use Hatcher's article as an anchor text as it levels the main criticisms I have read in all my research but I will integrate other contradicting and supporting literature along the way.

Hatcher begins by introducing us to the concept of distributed leadership or designer leadership and argues that it is popular with school managers as a means of getting commitment from staff to issues relating to the school. Hatcher then goes on to explore what he considers to be the key difficulties with the distributed leadership model. The first criticism that Hatcher poses is the dichotomy between distributed leadership and what he calls the UK governments "battery of regulatory and performance-management mechanisms" (Hatcher, 2005, p.253) to ensure teacher compliance. Head-teachers in England "must see themselves as strategists for implementing external directives, and as monitors, evaluators and managers of teacher and pupil standards which are defined elsewhere"(Hatcher 2005, p.253). In her article "Merits and Limitations of Distributed Leadership; Experiences and Understanding of School Principals", Lisa Wright (2008) agrees with Hatcher (2005) and refers to Halpin (2003) to support her claim that distributed leadership ignores the external factors the principal must adhere to. She criticises Spillane's (2006) distributed framework as she claims that it gives minimal attention to the roles, responsibilities or circumstances under

which the formal leader (i.e., the principal) must exercise leadership. To simply ignore the legislation and policies that define the role of the principal, and hold principals accountable for their actions and school-based results, would pose significant ethical, professional and organizational concerns.

Hatcher cites two mechanisms that the government use to ensure that their regulations are adhered to by head-teachers. The first of these mechanisms is Ofsted inspections and the second is pay and promotion. In England, head-teachers have to review teachers on the main pay spine annually and only if they are graded satisfactory can the move up the scale. After the threshold promotion is selective because of limited school budgets and is dependent on head- teachers judging whether the staff member has grown professionally.

Looking at Hatcher's arguments in the Irish context, the latter argument becomes redundant as teachers' pay and scales are determined by the department and all staff progress up the scale annually by virtue of being on contract to the school. In the case of the issue being examined in this project, the problem was identified by a group of staff members and following this finding the solution was encouraged and supported by the principal. The concept was certainly not what Hatcher calls an external directive. Because the idea came from within the staff and the meetings are coordinated and facilitated by me a relatively junior member of staff, it certainly can be considered an example of distributed leadership. The Irish equivalent of Ofsted Inspections is Whole School Evaluations which are conducted by the Department of Education and Skills. To some extent, Hatcher's argument that there is a contradiction between the concept of distributed leadership and external government agendas is valid. However, while there seems to be an increasing number of directives from the Department of Education and Skills, there still remains scope for teachers to engage in

projects that they identify as needs of their schools. These projects are often supported by external agencies such as the Special Education Support Service, Professional Development Service for Teachers and the Learning Schools Project. It could also be suggested that in England, educational ideology is treated in a far more political manner- throughout the article Hatcher refers to the New Labour educational reform, and new initiatives and teacher methodologies are introduced on a regular basis. In Ireland, the context is somewhat different and the introduction of new methods is not imposed in the same manner. However, Hatcher's argument that principals are answerable to outside forces and cannot always determine their own school policies is a fair criticism. Having said this, the principal does not need to hand over all the power and decision making in the school when enabling distributed leadership to take place. This study will hopefully demonstrate how communities of practice using a distributed leadership model can make a meaningful contribution to the day to day lives of the school as long as teachers are allowed to identify the areas of need themselves and they are not imposed on staff externally. In this manner, the distributed leadership model could work concurrently with traditional leadership roles.

Hatcher also looks at the external pressures faced by head-teachers that make sharing leadership too risky. Again Hatcher refers to the English model of head-teacher goals that are already predefined by government agendas, and targets, there is a risk that "distributed leadership may not succeed in reinforcing commitment to management agendas and it is head-teachers who are held accountable for meeting government targets" (p.260). Hatcher points out that the strategy most commonly adopted by head-teachers to minimise these risks is to restrict its operation to a minority of senior staff, the Senior Management Team. The effect of this distribution of power, according to Hatcher, is that it creates divisions between leaders and followers. Hatcher criticises this divisiveness in schools and puts forward his own

theory on how power can be distributed in schools. Again, I feel that Hatcher puts forward a valid argument but I believe that a school needs a variety of approaches to management as was stated above. It is important that there are senior managers who support the principal in completing the requirements of the department. But, surely this can be complemented with more junior staff members sharing good practice and finding solutions to issues that they encounter in their day to day teaching?

Wright further criticises Spillane (2006) arguing that he presents an alternative to hegemonic management models that limit widespread participation. The distributed leadership framework is predicated on a ready and willing cadre of followers waiting to assume leadership responsibilities. The assumption that closed social structures (e.g., internal professional learning communities) enhance leadership practice is also questionable according to Wright. Social relations may exemplify "collaborative, but exclusionary professionalism" (Hatcher, 2005, p.263). This may "spawn and sustain parochial beliefs and unproductive practices" if an "open exchange and critique of ideas and assumptions, multiple referents and sources of information, and equitable distribution of authority" (Smylie and Hart, 1999, p.437) is lacking in interactions of leaders, followers and their situation. Closed forms of distributed leadership limit collective and democratic management of schools through exclusion of certain individuals or groups from full participation (Hatcher, 2005). This was a danger posed in the context of St. Mary's where a small community of practice was established to work on the mentoring project. From the outset, the project was open to all staff to join but we were also aware that there was a danger that through regular meetings and decision making, it may become an exclusionary process making a small selective group of staff members feel empowered while a larger number could feel excluded. This, however, is a risk that I was prepared to take as, as was stated earlier, I have experienced initiatives

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involving all 80 staff members and these were impossible to facilitate and relatively little success was encountered.

To conclude, the research on distributed leadership has demonstrated that there are a variety of views on what distributed leadership is and its potential use in schools. From my reading I was very much aware that there limitations with the distributed leadership model in the context of Irish schools but having read a variety of research papers, I was satisfied that a distributed leadership model was the best way to ensure the community of practice met its goals and utilised the expertise of the staff involved to develop a mentoring programme for more-able students. The culture and situation in St. Mary's was open to the development and sustaining of a community of practice, there was a willingness of staff members to engage and involve themselves in a community of practice. The framework for examining distributed leadership as outlined by Spillane and Sherer was used; the roles of leaders, followers and the situation examined and as was how each played a role in the development of the mentoring programme.

2.15 Conclusion

Overall the literature highlights the various needs of gifted and talented pupils. Through Betts and Neiharts (1988) profiles we can see that they are not a homogenous group rather their personalities and consequently their needs may vary greatly. This justifies, in my view, a one to one mentoring approach with these students. We can see from the literature that when properly structured and conducted by committed professionals mentoring can be effective for the social and emotional as well as the cognitive development of young people. It could also help the pupils to achieve a more positive perception of their own identity. This project set

out to examine whether it would have such an impact with the students of St. Mary's Secondary school. It was also interesting to see the degree to which the positive psychology and metacognitive awareness benefited the pupils. In terms of the management of the project, a community of practice model was managed through a distributed leadership framework. The findings regarding all of these aspects of the project will be outlined in chapter four.

CHAPTER 3

Methodology

3.1 Introduction

This chapter focuses on the chosen research methodology for this project which is action research and looks at the various implications of choosing this methodology. As a starting point, an overview of the different research paradigms is given in order to provide a rationale for choosing action research as the methodological framework used for this study. The benefits as well as limitations of action research as a research methodology are outlined in this chapter. The model of action research set out by Jean McNiff (2002) will be explored and used as a means of structuring the latter part of the chapter. This model will be used to explain and examine issues such as: the data collection strategies used, the role of the researcher, ethical considerations, validity of research, confidentiality and data management and storage are also considered and discussed.

3.2 Action Research Defined

Research has been defined as "seeking through methodical processes to add to one's own body of knowledge and, hopefully, to that of others, by the discovery of non-trivial facts and insights" (Howard and Sharp, 1983, p.6). As such, research can be seen as a process where knowledge is sought about a given phenomenon which is valid and consistent. Zuber-Skerritt (1993, p.303) defines action research as the "collaborative, critical and self-critical enquiry into a major problem or issue or concern in their own practice" while Elliott (1991, p.3) claims that "action research is about improving practice rather than producing knowledge". Armstrong and Moore (2004, p.2) place action research in an educational context. They

contend that it is used to describe "the process of planning, transformation and evaluation which draw on insider practitioner enquiry and reflection and which focus on reducing inequalities and exclusion in education". Bassey (1998, p.93-95) also supports the placement of action research in educational contexts claiming that "Educational action research is an inquiry which is carried out in order to understand, to evaluate and then to change, in order to improve some educational practice."

3.3 Research Paradigms

It is generally accepted that the research methodology selected for a study should be informed by the nature of the question, which in turn will indicate what approach and methods should be used. The question in the case of this study is whether or not a mentoring intervention might help highly able but underachieving students bridge the gap between attainment and potential. Guba and Lincoln (1998, p.218) advise that no researcher "ought to go about the business of inquiry without being clear what paradigm informs or guides his or her approach" Different approaches use different methods of collecting and analysing data, but no approach prescribes nor automatically rejects any particular method. Each approach has its own strengths and weaknesses and each, it can be argued, is particularly suited to a particular context. Positivism, Naturalism and Critical Theory will be outlined below.

3.4 Positivism

According to Denscombe:

Positivism is an approach to social research which seeks to apply the natural science model of research to investigations of the social world. It is based on the assumption

that there are patterns and regularities, causes and consequences, in the social world just as there are in the natural world (2007, p.332).

Positivism, commonly known as experimental research or the scientific model, evolved in the late seventeenth century (Ellis and Crooks, 1998). A researcher operating within this paradigm believes that anything that is worth knowing can be known objectively.

Positivists live by the belief that valid knowledge can only be discovered when the researcher occupies the position of detached observer. In this understanding of research, the social science researcher is, therefore, an observer of social reality and for a statement to have any significance, it has to be based on empirical observation of facts by a person who remains outside the study (Schutt, 2006, p.40).

This paradigm predominantly uses quantitative tools to collect and measure data. Bell describes quantitative positivist research as a situation where "researchers collect facts and study the relationship of one set of facts to another. They measure, using scientific techniques that are likely produce quantified and, if possible, generalizable conclusions" (1993, p.5). Positivism, therefore, represents objective enquiry by a detached observer based on measurable variables and provable propositions.

Critics of this approach contend that it does not deal with complex human emotions and other motivations and understandings of research involving human subjects. The immense complexity of human nature and "the elusive and intangible quality of social phenomena contrasts strikingly with the order and regularity of the natural world" (Cohen and Mannion, 1994, p.12). This point is nowhere more relevant than in a school context where the

interactions between teachers and students are almost impossible to quantify in a mechanistic, dispassionate, value-free manner. Furthermore, it would be very difficult for a teacher conducting research within their own school to be a 'detached observer'. In the case of this research as the teacher, I am very much involved in the process and am seeking to make changes from within therefore my position would not constitute that of a detached observer.

Other critics of the positivist paradigm reject the notion of the absolute truth of knowledge arguing that we "cannot be 'positive' about our claims of knowledge when we are studying behaviour and actions of humans' (Creswell, 2003, p.7). Opponents of positivism view "reality not as an entity separate and external from the individual but as internally constructed. People perceive the world differently therefore reality is relative to each of us" (Agostino, 2005, p.5). The positivist approach would not be suited to this project as the project documents the experiences of all of the participants and the results will be relative to their findings and could not be considered an 'absolute truth'. Eraut (1998) describes the limitations of positivism in educational research:

> people have come to accept that empirically-based generalisations are likely to be sparse in education because contextual variations and individual differences have so great an effect on transactions and outcomes (Eraut, 1998, as cited in Strain et al., 1998, p.61).

This study will not adopt a positivist approach as it is felt that this approach does not delve deeply enough into the complexity of the phenomena it investigates, does not capture the nature of social interactions and fails to document the process and effects of change. As a teacher in a school in which this project will be conducted, I feel that I cannot be considered a detached observer. Furthermore, the data that will be collected will be qualitative in nature

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and is arguably, therefore, unsuitable to a positivist approach. Attempts to find alternative modes to study the complexities of human behaviour and the person as a whole led to the emergence of naturalistic approaches. Naturalism will be explored in the next section.

3.5 Naturalism

In the twentieth century another paradigm emerged which posited a different view with a more specific focus on the complexity of the human condition. This was known as the naturalistic paradigm and, unlike the positivists, these researchers believe that humans need to know far more about themselves and the world in which they live, than can be measured in a manner that prioritises detached objectivity (Ellis and Crookes 1998). Naturalistic philosophy believes that there can be any number of truths to a research question because the answers are generated from participants who have had the experience, rather than it being pre-determined in advance by the researcher (Ellis and Crookes, 1998). They also agree that the role of the researcher can never be one of neutrality.

Naturalistic researchers tend to use qualitative tools to capture their research data. It places emphasis on the process and seeks "to provide a deeper understanding of social phenomena than would be obtained from purely quantitative data" (Silverman, 2005, p.10). This model is interested in how understandings are formed, how roles are developed and the focus is on the natural setting. Arguable advantages of this model are that a) it is more flexible and b) it allows for more attention to detail which enables the researcher to build up a multidimensional picture. This in turn allows for the exploration of perspectives, experiences and feelings.

There are a number of limitations associated with the naturalistic approach. One of the most often cited is that the interpretation of data can be accused of being "impressionistic, subjective, biased ….and lacking in precision" (Hammersly et al. 2001, p.67). A further limitation of this approach is that it deals with single cases which rely on qualitative data and therefore "show little prospect of generalizing" (Denscombe 1998, p.80). Ellis and Crookes (1998), on the other hand, regard the flexible approach of a naturalistic enquiry as one of its strengths because it facilitates the researcher to explore the complexities and therefore the holism of the human experience. Bernstein (1974) also criticises naturalism with the argument that we make meaning of situations in a manner that is dictated by the circumstances and context in which we find ourselves and because of power relations. This view is supported by Cohen, Mannion and Morrison who suggest:

> The ability of certain individuals, groups, classes and authorities to persuade others to accept their definitions of situations demonstrates that while- as ethnomethodologists insist- social structure is a consequence of the way we perceive social relations, it is clearly more than this. ….the tension between agency and structure of social theorists; the danger of interactionist and interpretive approaches is their relative neglect of the power of external- structural- forces to shape behaviour and events". (Cohen, Mannion and Morrison, 2007, p.26).

This was certainly an issue that needed to be kept in mind when researching in a school where the researcher was a teacher and some of the subjects were students attending the school.

Another issue with the naturalistic paradigm is that in the case of this project while it is important to gain an understanding of why the students with whom we are dealing are

underachieving, it is also important to form an action plan to tackle the problem. Findings could identify the necessity to change our existing system of dealing with these students and to try out this new approach. A new naturalistic approach was adapted to counter act some of the criticisms of naturalism and to try to obtain a more complete account of human behaviour; this is the critical theory approach.

3.6 Critical Theory

Critical theory has emerged in recent years. Some theorists view it as part of the naturalistic paradigm while others view it as a paradigmatic approach in its own right. We associate the origins of this paradigm with the so-called Frankfurt school of theorists (Held, 1980). It evolved due to their dissatisfaction with different pieces of research conducted within other paradigms. They argued that the other paradigms presented "incomplete accounts of social behaviour by their neglect of the political and ideological contexts of much educational research" (Cohen, Manion and Morrison, 2000, p.28). Crotty (1998) describes it as a contrast between a research that seeks merely to understand and a research that challenges. Supporters of this paradigmatic approach reject positivism as they contend that "it reproduces only a certain kind of science, a science that silences too many voices" (Denzin and Lincoln, 1995, p.5). They agree with followers of the naturalistic paradigm that there are multiple realities but in critical theory it is believed that they are shaped by social, political, cultural and economic values.

Ellis and Crookes (1998) believe that traditionally the role of the researcher in both quantitative and qualitative research has been one of observer. Critical theorists aim to change the world by empowering the subjects of inquiry to perform social change. Ellis and

Crookes (1998) claim that in this way critical theory can be viewed as a form of change management. Webb (1990) also believes that the role of the researcher in the critical theory paradigm is to act as a change agent. This is supported by Lynch (2000) who claims that "what distinguished critical theories therefore was their emphatic normative and transformative orientation" (Lynch, 2002, p.65). They were theories with a "practical intent" (Benhabib, 1986, p.253). This intent may take many forms with the research itself being the medium through which the change is enacted.

Lynch (2000) goes on to argue that "One of the important contributions which critical theory has made is to highlight the importance of the emancipatory potential of research" (Lynch 2000, p.66). She believes that critical theory:

> promotes a deeper understanding both on the part of those being researched and of the researcher herself, and of the issues being examined. The goal is not just to generate empirically grounded theoretical knowledge but to ensure that people know and understand their own oppressions more clearly so that they can work to change them (Lynch, 2000, p.66).

Some researchers (Ellis and Crookes, 1998) believe that action research falls into the paradigm of critical theory. Others such as Zuber-Skerrit see Action Research as "an appropriate research paradigm" (1996, p.3) in its own right while acknowledging that many leading action researchers "have critically reflected on their theory and practice with a focus on emancipatory or critical action research, based on the Frankfurt School of Critical Theory" (1996, p.3).

An obvious criticism of the critical theory is that it could be subject to bias on the part of the researcher. Because the researcher is not assuming the role of detached observer, rather as a

change agent, there is a risk that the researcher could orchestrate change for personal gain as opposed to the general good. It is imperative, therefore, that the researcher is honest in the findings and works hard to ensure all the data is triangulated to reduce the risk of bias. This will be discussed in a later section.

3.7 Action Research

As outlined above, action research is a research methodology that arguably falls into the critical theory paradigm. As a research methodology it certainly shares many central values with critical theory. According to Jean McNiff, "Today it (action research) is recognised as a valid form of enquiry, with its own methodologies and epistemologies, its own criteria and standards of judgement" (McNiff, 2002, p.1) and McNiff would argue that it could even be considered a paradigmatic approach in its own right. Action research is recommended as a research strategy when "a new approach is to be grafted onto an existing system" (Cohen and Mannion, 1994, p.194) and the "fundamental aim …is to improve practice" (Elliot, 2001, p.49). Furlong & Oancea suggest action research can contribute to more theoretical knowledge production while at the same time achieving changed practice. They believe that it "challenges any simplistic distinction between 'pure', applied' and 'strategic' research" (Furlong & Oancea, 2005, p.8).

McKernan describes Kurt Lewin as the "founding father" (McKernan, 1996, p.8) of Action Research. The term was first coined by Lewin (1948) who stated that it involves "a spiral of steps comprising of planning, action and fact finding about the result of the action which allows development of understanding on an on-going basis" (Lewin, 1946, p.2). By the mid-1970s, the field of action research had evolved, revealing four main streams that had

emerged: traditional, contextual (action learning), radical, and educational action research. In the booklet, "Action research for professional development. Concise advice for new action researchers", Jean McNiff discusses the various models and different interpretations of action research:

> Some people prioritise technical aspects, believing that it is important to get the method right. Other people are also interested in the values that inform action research, such as a belief that people should be in control of their work and the way they conduct that work, and how the research can lead to a living out of those values. Most people recognise the educational base of action research (McNiff, 2002, p.8).

Educational action research has its foundations in the writings of John Dewey, the American educational philosopher of the 1920s and 30s, who believed that professional educators should become involved in community problem-solving. Its practitioners, not surprisingly, operate mainly out of educational institutions, and focus on development of curriculum, professional development, and applying learning in a social context. This project is an educational action research project. The aim of this research project is not only to identify and understand the problem which exists with pupils who have been identified as possessing ability but who are underachieving but it is also to introduce a new approach to current policy regarding these students in the school. The findings of the project will hopefully be used to devise and implement a mentoring project catering for the needs of the more-able students in St. Mary's Secondary School and for this project to continue on an on-going basis. It is taking a new approach to the education of more-able students and grafting it on the existing system of catering for these students in our school. It could therefore be classified as an educational action research project.

Elliott furthered the cause of action research as a method for teachers doing research in their own classrooms through the Ford Teaching Project in the UK (Elliot, 1991). The Ford T Project, as it became known, worked with forty teachers and demonstrated that teachers were able to research and improve their own practice. The idea has since spread to many parts of the world and the Collaborative Action Research Network [CARN] is now an international organisation with members from a range of professions such as the health service and the police, in addition to teachers. Elliot claims that action research "attempts to improve the quality of life in a social situation" (Elliott, 1981, p.21).

Educational action research was later popularised in Ireland by the work of Jean McNiff and Una Collins through the Schools Based Action Research Project (McNiff and Collins, 1994). The project was generally recognised in Irish education circles as successful (Hyland and Hanafin, 1997; Leonard, 1996) and initial numbers of participating teachers grew from an intended initial 30 to over 80 over the three years of its duration. According to McNiff's writings on her website:

> Action research is now high profile in Ireland. Some fifty validated masters
>
> dissertations exist to show how practitioners have asked the core question, 'How do I
>
> improve my work?' Another twenty are due to complete in coming months. Fifteen
>
> MPhil and PhD theses are in progress. All dissertations and theses are self-studies and
>
> all contain validated evidence to support claims that personal learning has influenced
>
> the quality of educational experience for students, and have also impacted on wider
>
> institutional contexts" (McNiff, 2001).

Action research's growth in popularity in Ireland can be seen in documents emanating from the Department of Education and Science (Government of Ireland 1995, 1999, 2000), and in curriculum matters (Fitzgerald 1998).

3.7.1 Advantages and Disadvantages of Action Research

Action research appeals to me because it is self- reflective in nature. It is different from other forms of research which focus primarily on contributing to the body of knowledge (Carr and Kemmis, 1986). Schon's (1983) model of the reflective practitioner; someone with "the capacity to reflect on action so as to engage in a process of continuous learning" (Schon, 1983, p.5) is often used by action researchers. As a methodology, Action Research seeks to contribute to the body of knowledge, to reflect on the findings "to enhance and systmatize that reflection" (Descombe, 1998, p.60) and consequently to make changes to improve practice. "It is good research practice to take stock from time to time in order to decide how to move forward" (McNiff, 2002, p.2).

Another appealing aspect of action research is that it is practitioner-based research. I like how it bridges the gap between theory, research and practice by having a practitioner engage in the research. Farren and Crotty (2010) argue that action research helps practitioners to develop an awareness of practice. It empowers us as practitioners to bring about improvement in our own practice and may even lead to a more participative view of teaching and learning. I appreciate that the practitioner acting as a researcher can also be viewed as a limitation in that it can call the validity of the research into question due to apparent biases on the part of the researcher (Denscombe, 1998). There needs, therefore, to be a willingness to identify and to share successful and not so successful practice without fear and in an unbiased fashion. This is something that I will definitely keep in mind when conducting this research. I also

feel that in a way this is less likely to be an issue in the case of this research. The research has been prompted by a perceived need in the school; as part of the project the need is to be filled by teachers volunteering their own time. If we are going to change the approach we take in dealing with students of exceptional ability, then it needs to be in a manner that makes best use of both teacher and pupils' time and this will be at the foremost of my mind when analysing the findings of this research.

McNiff (2002) also warns about particular perils of action research claiming that we must not let action research become just a set of procedures based not only on rules but also on values. Values as defined by Raths et al are:

> things that are considered good….or beliefs or feelings an individual is proud of, is willing to publicly affirm, has been chosen thoughtfully from alternatives without persuasion and is acted on repeatedly (Raths, 1986 as cited in Halstead and Taylor, 1996, p.1).

Lomax in Coleman and Briggs claims that values give "meaning and purpose" to our work (2002, p.126). She suggests that our values explain how we make our judgements and why it is essential that we clarify our values in order to undertake action research. During action research our values may be questioned, modified, clarified or even changed as the research proceeds. Honesty and integrity are integral to the process. This will be explored in more detail in a later section dealing with ethics.

3.8 Using Action Research

According to Carr and Kemmis (1986, p.165), Lewin identified two essential aims of action research. These were to improve and involve others in both research and action. They

highlight three areas where this may occur: practice, understanding of practice and improving the situation where practice takes place. According to Lewin (1952) the first step in any action research is fact finding. It is necessary to learn as much about the idea to be researched as possible. It is from this fact finding that two things should become apparent: the overall plan should become clear and decision should be taken regarding the first action.

A number of models for an action research plan are available in the literature surrounding the subject. For the purpose of this project, the model of action research developed by Jack Whitehead and modified by McNiff was be used. Having looked at other models, I found the questions posed by this model to be the most suitable to the research questions I was posing. The action plan is published by McNiff as follows:

- What issue am I interested in researching?

- Why do I want to research this issue?

- What kind of evidence can I gather to show why I am interested in this issue?

- What can I do? What will I do?

- What kind of evidence can I gather to show that I am having an influence?

- How can I explain that influence?

- How can I ensure that any judgements I might make are reasonably fair and accurate?

- How will I change my practice in the light of my evaluation? (McNiff, 2002, p.14)

3.9 McNiff's Model of Action Research

Below the headings outlined by McNiff will be used as sub-headings to establish how the action research model was used. The majority of the questions will be dealt with below, however the final question will form part of the findings chapter as it is better placed there.

3.9.1 What Issue am I Interested in Researching?

"As educators the key question of our action research is 'How can I help my students improve their quality of learning'. For the action research educator the key question is 'How can I use action research to improve my own learning and be a better practitioner'" (Kenny and Hynes, 2009, p.5). As outlined earlier, the area that I was interested in researching was the area of more-able students, why a particular group were underachieving and whether one to one mentoring could assist these students in achieving their potential.

3.9.2 Why Do I Want to Research this Issue?

Richard Sagor (2010) argues that researchers should research an issue "of unique, personal and passionate concern" (Sagor, 2010, p.5). As a teacher I have long felt that we have not been adequately catering for the needs of the more-able students in the Irish mainstream classroom. I passionately believe that we need to listen to these students and to provide them with strategies to enable them to get more out of their education.

3.9.3 What Kind of Evidence Can I Gather to Show Why I Am Interested in this Issue?

The literature reviewed on gifted and talented education as well as the merits of mentoring as a means of intervention are the evidence to show why I am interested in the issue and that it is an issue worth exploring. I can also draw from the report that a colleague and I wrote on this issue for LSP1 in 2006.

3.9.4 What Can I Do? What Will I Do?

McNiff et al. (1996) highlight the importance of negotiating access with three distinct groups prior to the commencement of research that involves human participants. These groups are

authorities, participants and parents, guardians or supervisors. Negotiations were held, therefore, with the school principal initially about the suitability and practicality of the project within the context of a busy secondary school. Ethical procedures were followed in seeking approval from the Board of Management after the principal had confirmed his support. (Appendix E)

Two separate sets of participants were needed for the project. Eight teachers were needed to act as mentors and eight students had to be chosen to participate in the project also. There was already a working group within the school looking at differentiation strategies targeting more-able students. The idea for the mentoring project emerged from discussions in this group. The majority of staff members involved in the mentoring had already been involved in this working group and so the context was known to them already. Many of the teachers began therefore with a working knowledge of the theory behind the education of the more-able. New members also joined the group and provided a fresh perspective. The interest the teachers had already voluntarily demonstrated convinced me that they would certainly be capable of developing the kind of 'caring relationship' that the literature suggested was necessary. (DuBois, 2008) McNiff et al (1996) also emphasised the importance of keeping others informed about the progress of the project. Regular meetings were scheduled and hand outs were issued to the teachers involved to inform them of the progress of the project. Parents were kept up to date via e-mail throughout the process and by a meeting at the end.

The second group that needed to be chosen were the eight students who were to participate in the project. These students were selected using a different means. Quantitative methods were initially used. To begin with, the students were selected using the testing that all students participate in at the start of first year. These tests are the Cognitive Abilities Test (CAT3) and

the Drumcondra Reasoning Test (DRT). Studies suggest that school communities should consider their top 10% as more-able students (Special Education Review Committee,1993; NCCA, 2007). Standardised tests can be considered problematic in their own way. As Ayers (1993) tells us:

> Standardized tests can't measure initiative, creativity, imagination, conceptual thinking, curiosity, effort, irony, judgment, commitment, nuance, good will, ethical reflection, or a host of other valuable dispositions and attributes. What they can measure and count are isolated skills, specific facts and function, content knowledge, the least interesting and least significant aspects of learning.

Obviously, in a project that focuses on ability, using tests that some contend do not allow for higher order skills such as creativity and imagination seems almost paradoxical. However, it was felt that we needed to identify a cohort of students who we could comprehensively argue possessed a certain level of ability and we compared the students results across two standardised tests to ensure consistency in that way we were able to pick up the students who might have had a bad day or been put off by nerves on the day of one of the tests.

As our year group contains 230 students, this gave us a group of approximately twenty three students, who were identified as possessing particularly strong ability. The mentors then discussed each child using their summer test results as a gauge of their achievement and decided on a group of eight who they felt would most benefit from mentoring based both on their summer test results and the comments made by teachers on the same reports. Teachers also used their own personal experiences of and knowledge of the students in this discussion. Once identified students were given the option to participate. It was voluntary participation on the students' part.

Once the relevant bodies had been informed and the participants identified, the project aim was to set up a mentoring project to try to equip the students with higher order thinking skills, with organisation skills and to ensure that they have a growth mindset when it comes to learning. A community of practice was established with the mentors and the outcome of discussions when this community met was documented and this information enabled the creation of a mentoring handbook which would act as a loose structure for the mentoring sessions.

The community of practice worked in three distinct cycles. The cycles were planned to fall in line with the school year. They were based on Kolb's (1984) experiential learning cycle. As can be seen in Figure 2, the cycle comprises four different stages of learning from experience and can be entered at any point but all stages must be followed in sequence for successful learning to take place. The Learning Cycle suggests that it is not sufficient to have an experience in order to learn. It is necessary to reflect on the experience to make generalisations and formulate concepts which can then be applied to new situations. This learning must then be tested out in new situations. The learner must make the link between the theory and action by planning, acting out, reflecting and relating it back to the theory. This cycle was also used as a model for the reflection sheet that was included following each session in the Mentoring Handbook.
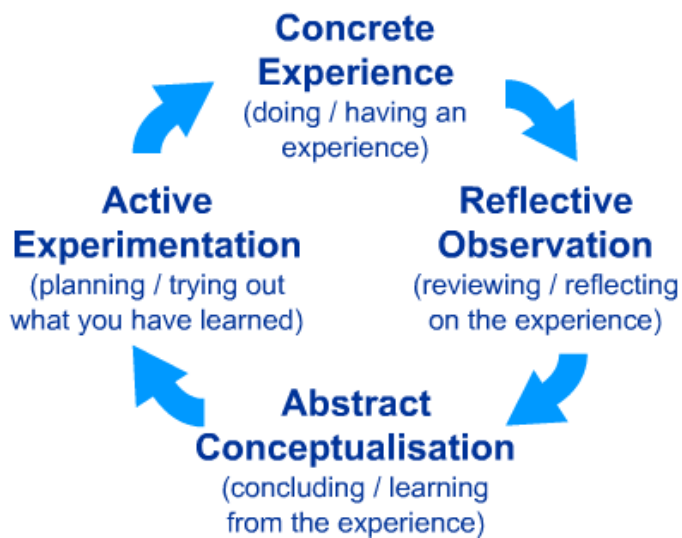
Figure 2 (Kolb, 1984 as cited by Davies and Lowe, 2011)

The mentoring operated in three cycles and an action plans or changes occurred at the end of each stage. It was hoped that through this a proposed model would exist at the end that could become a permanent change in the system in the school.

3.9.5 What Kind of Evidence Can I Gather to Show That I Am Having an Influence?

In order to identify whether the project was successful, there was a need to gather data. An outline of the data collected from the three main sources of data in this study can be seen in Figure 3 on page 100.

This study used mixed methods data collection approach. Teddlie and Yu (2007) tells us that new methodologies and epistemologies have emerged that allow for the integration of a variety of methods and researchers should be encourage to use mixed methods, including quantitative and qualitative approaches. Cohen and Mannion (1994, p.238) argue that "so complex and involved is the teaching – learning processes in the context of the school that the single method approach yields only limited and sometimes misleading data". It was,

therefore, important that for the purpose of this project mixed methods of data collection were used.

A basic description of a mixed methodology is that it is a methodology with methods that have comparisons between quantitative and qualitative data (Jones, 2004). Quantitative data is data in numerical form, often derived from questionnaires or structured interviews. Qualitative data is descriptive data from observation or unstructured interviews (Taylor et al., 1995, p.632). In a recent analysis of mixed methods in organisational systems, Rocco, Bliss, Gallagher and Perez-Prado (2003, p.19) remind us that:

> More useful research says something important about the phenomena under study. It is insightful, and its explanations are plausible. Many researchers find that to conduct this level of research involves mixing methods and perhaps also mixing paradigms.

For the purpose of this study a quantitative approach was used to initially identify the students who were going to be mentored. Qualitative data was collected to gain a description of their experience of the process but some of the data was analysed and will be presented in numeric form. A variety of qualitative data collection methods were also used. The methods of data collected will be outlined below.

3.9.5.1 Data Collection

The main instruments which were used in the course of this study were: a focus group meeting with parents prior to and at the completion of the project as well as a semi-structured individual interview with the students prior to and after the mentoring period. At the official end of the mentoring period a focus group of students met to discuss their experiences. The areas for discussion emerged from the findings of student questionnaires which had been

administered beforehand. Teacher feedback was on-going. The community of practice model (Lave and Wenger, 1991 and Spillane, 2007) was used by teachers to reflect on issues and these meetings were minuted while one of the meetings was recorded using an MP3 player (Appendix H p.5-7). All teachers involved in the project, including myself, were asked to keep reflections after each mentoring session. Teachers submitted a report at the end of each reflective cycle. Students were also encouraged to write reflections and to hand those in at the end of the process also.

Below each of the main methods of data collection will be outlined. As the initial meeting took the form of a parent focus group, focus groups will be dealt with in the first instance. Although the student focus group did not occur until the end of the process it will be dealt with alongside the parent focus group below. Following this, interviews will be examined, questionnaires explored and reflective diaries considered.

3.9.5.2 Focus Group Interview

Focus groups are often referred to as group interviews. However, there are some differences between semi-structured group interviews and semi-structured one-to-one interviews. A focus group involves a number of people with common experiences, who are interviewed by a researcher for the purpose of extracting their ideas, thoughts and perceptions about a specific topic. Glesne and Peshkin (1992) argue that interviewing more than one person at a time can have many benefits. They believe that often young people need others to be present in order be encouraged to talk, and some subjects are better discussed by a small group who know each other.

Kreuger (1998) defined a focus group as a "carefully planned discussion designed to obtain perceptions in a defined area of interest in a permissive, non-threatening environment" (1988, p.18). Kreuger states that a small group containing four to six people is ideal when interviewees have a lot to share about the subject (Kreuger, 1988, p.94). The size of the group chosen for each focus group session involving students was four in order to allow the pupils to be able to fully discuss their experience of mentoring. I felt that a larger group would not enable each pupil to fully participate and it was important to ensure that all the students' voices were heard. For focus groups involving parents, the parents of all eight of the students being mentored would be in attendance at the one time. This was necessary as the principal had to be present at the parent focus group and it was preferential to him that we met all the parents at the one sitting.

3.9.5.3 Parent Focus Group

The purpose of the initial parent focus group was to ascertain whether the parents felt the project would be worthwhile. It was also hoped that they would help us to tease out certain logistical factors with regards to the project. As was suggested in 3.9.5.2, there were practical reasons for using a focus group in that it would have been very difficult to see all the parents individually. In addition to that, however, it was felt that getting the parents together to tease out some of the key issues might be an enlightening experience both for them and for me as a researcher. As outlined in the literature review many exceptionally able students suffer with social and emotional issues and so the parents' advice on how to introduce the project to the students as well as areas around confidentiality were necessary. In order to promote discussion a series of open ended prompt questions were projected on to the whiteboard at the front of the room. Parents were given the opportunity to contribute their opinions and the minutes of the meetings were recorded. (Appendix K).

Decisions made at this meeting led to introducing the concept to the students at home and then this being supported by me at a one to one meeting with the students. The meeting would also be used to ascertain from the students why they feel they are underachieving in school. Parents were given a separate feedback sheet to take home in case there were any further issues that they thought might be important after the meeting had concluded.

3.9.5.4 Student Focus Group

Prior to participating in the student focus group, each student had additionally filled in a questionnaire. It was felt that a student focus group would be a good way to tease out some of the issues raised in the questionnaires in a non-threatening environment. Like with the parent focus group, it was felt that a lot could be learned from the discussion that would occur in the focus group. The same level of discussion may not occur in a one to one interview after the students had filled in a questionnaire. This would be particularly true for students who might have said something negative in the questionnaire as the student might feel the teacher is in some way trying to find out who made the negative comments and why. This situation would not occur in a focus group where the facilitator simply phrased questions in a non threatening manner to the whole group for example "Why might someone say this?". The questions which the group were asked were selected beforehand and tested on two separate occasions with other students to ensure that the meaning of the questions were clear and not misleading. In these tests the questions which proved to be unsuccessful in their probing were altered or in some cases dropped entirely. The final questions which were asked were semi-structured in that they were open-ended questions which were decided on beforehand in order to let the interviewees provide a wide range of answers. Many of the questions emerged from student responses to the questionnaire which I felt needed clarifying in a non-threatening manner.

The students gave their answers one at a time and sometimes were pressed to elaborate on what they said. The focus group met in a small room which the students were very familiar with and their answers were recorded using an MP3 player which was placed in front of them.

There were some aspects that concerned me regarding the use of a student focus group. The first of these was the fact that we were dealing with teenagers who are at a stage in their lives where they can be very self-conscious. Being identified as a more-able student may have been a label that many students would not want to wear and therefore may not like participating in the focus group. It was made clear to all students that participation was entirely optional.

Furthermore, I was worried that certain students would lead the discussion and other students may be afraid to speak out if they held a differing opinion. I countered this concern as best I could by discussing this issue openly with the students prior to the focus group interview and again emphasising the importance that all opinions needed to be heard if we were going to improve the work experience provision for all students. I explained to students that everyone experiences things differently and that if we have a variety of opinions we could cater for everyone's needs. I also told students that if they heard something they disagreed with but did not feel like discussing it in front of the group, they could come and speak to me privately. Students did not avail of this option, however. During the focus group, I ensured that all students had the chance to speak. Finally, the evaluation sheet as well as individual interviews gave me insight into all students' opinions and enabled me to steer the focus group and ensure that the majority of students' opinions were represented.

3.9.5.5 Interview

Webb and Webb see the interview method of research is "a conversation with a purpose" (1932, p.130). Cohen, Mannion and Morrison (2000, p.267) describe interviews as the opportunity for subjects:

> to discuss their interpretations of the world in which they live and to express how they regard situations from their own point of view. In these senses the interview is not simply concerned with collecting data about life: it is part of life itself, its human embeddedness is inescapable.

The interview can yield rich material and can often put "flesh on the bones of questionnaire responses" (Bell, 2005, p.157). Silverman argues that:

> Qualitative interviewing is particularly useful as a research method for accessing individuals' attitudes and values –things that cannot be observed in a formal questionnaire. Qualitative interviewing, when done well, is able to achieve a level of depth and complexity that is not available to other, particularly survey based approaches" (2006, p.114).

The interviewer in one-to-one conversation gathers detailed personal information from individuals using verbal questioning. The interview is used commonly to compliment and extend our knowledge about an individual's thoughts, feelings and behaviour. Face to face interviews allow for the researcher to seek clarification, further explore the responses given by the participants and gain depth of response (Burns and Grove, 2001).

Interviews may be unstructured where there is no format, semi-structured where there is some format, usually with open ended questions where the interview is permitted to go in

directions beyond the bounds of that format and finally the structured interview where a few issues are discussed in great detail. As stated by (Marshall and Rossman, 1999, p.108) "Interviewing varies in terms of a priori structure and in the latitude the interviewee has in responding to questions".

The semi-structured interview allows for the interviewer to participate actively in the interview process while ensuring the key issues are discussed. Thus, the researcher is viewed as the primary instrument for data collection and analysis (Punch, 2000). In order to gather as much reliable information as possible from an interview it is essential that it is thoroughly prepared for in advance. Cohen (1976) as cited it Bell (1993) uses the analogy that "like fishing, interviewing is an activity requiring careful preparation, much patience, and considerable practice if the eventual reward is to be a worthwhile catch" (Cohen, 1976 as cited in Bell 1993 p.92).

A semi-structured interview format was chosen for the purpose of this project. The intention was to provide "a frame of reference for respondents' answers but put a minimum of restraint on the answers and their expression" (Cohen and Manion, 2000, p.297). For the purpose of this study, three key areas that needed to be discussed with the students were identified. A visual aid was also prepared for the students in advance to ensure that the interview remained on focus. This visual aid was Eyre's (2009) equation for achievement which was outlined above. Sellit et al (cited in Bell, 2001, p.139) argue of the danger of bias creeping into interviews "largely because the interviewer is a human being and not a machine". As part of the process, prior to the interview taking place the questions will be shared with the mentors to ensure that they feel they are neutral. They will also be shared with a staff member outside

of the project and finally a test run will take place with students not involved in the project to ensure the questions are clear.

3.9.5.6 Types of Questions

Although the interview must be well-prepared it should only be half-scripted, thus allowing for improvisation of questions by the interviewer. The prepared questions should be left open-ended in order that they can be improvised depending on responses from the interviewee. Streubert and Carepenter (1999) believe that open ended questions allow the participants to tell their stories in their own words and that these result in greater depth in the information provided. Prior to the commencement of the interviews, research was conducted into the various factors that lead to successful learning for more-able students and these factors were used to guide me in the questions I used. An effort was made to ensure that the questions were open-ended and that they were not leading.

The degree to which a successful interview will take place can often depend on the interaction between the interviewer and interviewee. Chirban argues that:

> the following characteristics enhance the interviewee: interviewer relationship;
> integrity, motivation, trust, openness, empathy, insight, nurturance, truth, respect and
> faith" (Chirban, 1996, p.43).

As such I would like to think that to achieve the aims of this research I developed a rapport that is the 'result of a positive, pleasant, yet business-like approach" (Smith, 1972, p.72) with the students and teachers involved in the project.

Although several established general questions had been decided upon beforehand it was hoped that this method would allow for an exploration of emergent themes and ideas through

probing, rather than relying only on concepts and questions defined in advance of the interview. I was concerned that the power dynamics of the teacher-student relationship could skew the students' responses somewhat and so from the outset I emphasised the importance of honesty in answering in order to achieve validity in my research. I also emphasised that the students were not going to get in any kind of trouble for answering honestly.

Before being interviewed the students were given an information sheet and a consent form. (Appendix C). They were told that they did not have to participate in the project and that they would benefit only if their involvement was voluntary. When the students had filled in their consent forms, they were invited to an interview. Prior to the interview, it was explained that the interview would last one class period (forty minutes) and that the interview would be recorded. As was stated earlier, the necessity for them to be honest was emphasised and the fact that they would not get into trouble for answering honestly was clearly emphasised. The same questions were asked more than once using different language at different stages in the interview to check if the students were responding in a consistent fashion.

At the end of the process to measure success students filled out questionnaires to evaluate the process and then participated in student focus groups. The parents filled in questionnaires and we met to discuss their findings. The teachers submitted a written report on the process as well as handing in their learning journal.

3.9.5.7 Student Questionnaires

The questionnaire is a widely used tool in social science for gathering quantitative data. McNiff, Lomax and Whitehead identify two good reasons for using questionnaires:

to find out basic information that cannot be ascertained otherwise. To evaluate the
effect of an intervention when it is inappropriate to get feedback in another way
(1996, p.98).

Literature highlights the need to spend time on the design of a questionnaire, and also on the
need to pre-test it on a sample before using it as a research instrument (Bell, 1993;
Denscombe, 2003; Schutt, 2006). Care was taken when selecting the question type; I ensured
that the questions on the questionnaire were as open ended as possible. "Open questions
because they allow the respondent to express a broad range of ideas" (McNiff, Lomax,
Whitehead, 1996, p.99).

For the purpose of this study, it was decided that using questionnaires would be a good means
of gathering data from the students. The students could fill in the questionnaires anonymously
and therefore would be free to write what they wanted without worrying that their mentor or I
might see and be in some way angry with or disappointed in them. It was stressed with the
students throughout that their honest feedback would be integral to the process but as a
researcher I was always aware of the power dynamic that existed between the teachers and
students and so a questionnaire was deemed a suitable means to combat this.

Students were also asked to keep a reflective diary which they were to fill in at the end of
each mentoring session. The rationale for this was twofold. Firstly, as we were encouraging
the students to understand metacognition and to take more control of how they learn, a
reflective diary would be an example of this in practise. Furthermore, I felt that when it came
to filling in the questionnaires at the end, if the students had kept reflections as they were
going along, the questionnaire responses would be more considered and more representative

of the whole experience for the student. At the end of the process the students were asked to fill in a questionnaire. Prior to the being given the questionnaire to fill in, they were asked to review their reflective diaries. The evaluation sheet focussed on the following main aspects: the students' opinions on the various metacognitive strategies they used; the students' relationships with their mentors and any aspects of the mentoring they felt could have been improved upon (Appendix J p.10-16)

Before I administered the questionnaire I shared the questions with the teachers involved in the project and made changes they felt were necessary. Furthermore, the questions were piloted with a different group of students to ensure clarity of wording and content.

In order to ensure the validity of the research, I administered the questionnaires to the students personally encouraging them to be as honest as possible but to be constructive in their honesty. I explained the students the importance of honest and constructive feedback so that we can improve the mentoring programme for students next year. Also although these students have already been identified as being more-able, they were still teenagers of varying levels of literacy and so there was a danger of students misreading the questions or of not understanding or being able to read the questions at all. I tried to counter this by reading the questionnaire with the student initially while carefully explaining the meaning of each question. I tried to explain the questions in neutral tones so the students did not feel that I was indicating that I was hoping for them to answer the questions in a particular way.

Because the sample is small, it was possible for me to closely analyse the response of each subject. Common themes within responses were teased out. These issues that the students raised in the questionnaire were used to direct the focus of the group discussion. The students could then elaborate on issues identified in the evaluation sheet if they comfortable to do so.

Also, is students disagreed with the feeling of other students; they would have the opportunity to express their responses in this instance.

3.9.5.8 Parent Evaluation Sheet

Again the parent evaluation sheet took the form of a questionnaire with very open ended questions. This was sent home to parents prior to the final focus group meeting of parents. Parents were asked to return their written feedback prior to the meeting and like the student questionnaire the questions were open ended and the answers were used to provoke discussion at the focus group. (Appendix K). Parents were given the option of signing the survey or remaining anonymous. Again it was hoped that parents would feel this was an opportunity to submit feedback that they may not have wanted to give in person.

3.9.5.9 Learning Journal

Action research involves keeping a personal journal throughout the process so that the researcher can record reflections and learning experienced along the research journey. According to McNiff and Whitehad (2002, p.94) "diaries are particularly valuable sources of data because they show not only a development in the action but also a development in the thinking".

 "Diaries are tantalizingly attractive because they appear, on the surface, to provide means of generating very substantial amounts of data with minimal effort on the part of the enquirer" (Robson, 2002, p.258). During the research journey the diary will also be used as an organisational tool. (Altrichter et al., 1993, p.11) highlight that:

> a diary can develop a quality which makes it more valuable than other research
>
> methods: it becomes a companion of your own personal development through

research; it links investigative and innovative activities; it documents the development of perceptions and insights across the different stages of the research process. In this way, it makes visible both the successful and (apparently) unsuccessful routes of learning and discovery so that they can be revisited and subjected to analysis.

 Entries to the diary were done approximately twice a week throughout the research journey. These diary entries helped keep me focused on issues that may need to be revisited or if a thought comes to mind throughout the week that I may need to deal with, all this will be included in the diary. (Apendix L)

Furthermore, the actual recording of the data assists the researcher in comprehending what he or she had learned and reflecting on this can influence the direction of the research study (Coghlan and Brannick, 2001). Problems and potential bias can be identified early and rectified. The material generated is dependent on the researcher and if used appropriately can generate rich data that can add to the rigour of the research project. (Clayton and Thorne, 2000). "Keeping such a diary ensures that data collection is not artificially separated from reflection and analysis and that it may even facilitate reflection on our own learning" (Altrichter et al., 1993, p.12- 13).

3.9.5.10 Teacher Reports

At the end of each cycle, teachers were asked to submit a report on the process. These reports were submitted to me in writing but were also discussed in the meetings. The reports were built around the reflective cycle. The teachers were asked to structure their reports using the headings outlined in the reflective cycle model. They described their concrete experience, reflected on the experience, identified learning and made an action plan based on this for the next cycle.

The reports had a dual purpose. They provided useful data about the teachers' perspective about the experience and what was working and what could be improved. Furthermore, they also got the teachers thinking about areas that could be improved in the mentoring project and enabled them to design an action plan for the next cycle. They provide useful data on the mentors' experience of the project.

Students	• October - Individual Interviews October- May: Student Reflections completed • April- Student Questionnaires • May- Student focus groups
Parents	• October- Focus Group Interviews • April- Evaluation Sheets • May- Parent Focus Group
Mentors	• August- May- Meetings with minutes kept as data • October- May- Mentoring reflections kept throughout • May- Final mentoring reports submitted • Individual interviews conducted with some mentors

Figure 3: Outline of timeline and data collected from different sources

3.10 How Can I Explain That Influence?

The influence will be explained through the analysis of the data. Every effort will be made to ensure the validity of the findings.

3.10.1 Data Analysis

Miles (1979 as citied in Bryman, 2001) has described qualitative data as an 'attractive nuisance' because of the "attractiveness of its richness but the difficulty of finding analytic paths through this richness". The qualitative data obtained from the face to face interview

transcriptions as well as the qualitative questions included in the questionnaire were analysed through coding. According to Kerlinger (1970, cited in Cohen and Mannion, 1994, p.286) coding is the "translation of question responses and respondent information to specific categories for the purpose of analysis" (Denscombe, 2007, p.257) explains that "Coding entails the attribution of a number to a piece of data, or group of data, with the express aim of allowing such data to be analysed in quantitative terms". The analysis of interpreting qualitative data such as interview transcriptions should according follow the following process:

- Code the data – Codes are tags or labels that are attached to the raw data

- Categorise these codes – The categories act as an umbrella under which a number of individual codes can be placed

- Identify themes and relationships among the codes and categories – The task for the researcher is to make the link

- Develop concepts and arrive at some generalised statements – These should be developed based on relationships, patterns and themes that have been identified in the data (Denscombe, 2007, p.292). The researcher hopes at the end of this coding to be able to identify common emergent themes

According to Coffey and Atkinson (1995, p.27) "coding thus links all those data fragments to a particular idea or concept, such concepts are in turn related to one another". As Seidel and Kelle (1995, p.52) note:

> codes represent the decisive link between the original 'raw data', that is, the textual material such as interview transcripts or field notes, on the one hand and the researcher's theoretical concepts on the other.

Examples of the coding used in this project are examined in the next chapter.

3.10.2 Validity

Validity is essential for concrete and trustworthy research "The idea of validity hinges around the extent to which research data and the methods for obtaining the data are deemed accurate, honest and on target" (Denscombe, 2007, p.35). In order to ensure the study is valid, honest and transparent throughout, triangulation occurred as answers in the questionnaire were compared to the semi-structured interviews and to the focus groups. Interview data, questionnaires, and research diary gave validity to the study. Triangulation will be explored in more detail in a later section.

"All educational research studies must be conducted in a rigorous manner so as to ensure that the insights and conclusions that are presented ring true to readers, educators and other researchers" (Merriam, 1998, p.199). This project was an important project within the school. With limited resources and great demands on teachers' time, it was very important that the results of this research are accurate as they could inform policy in the school. McNiff (1998) identifies three steps towards establishing validity in action research projects:
- ○ Self-validation
- ○ Peer validation
- ○ Learner validation

3.10.3 Self-Validation

"This is when you check your findings, in the form of your own knowledge claims against your values" (McNiff and Whitehead, 2009, p.194) McNiff, Lomax and Whitehead (1996, p.108) pose the following questions with regards to self-validation. "As a responsible practitioner, can you show to your own satisfaction that you have done the things you set out to do? Can you show that you have carried out a systematic enquiry, to help you live out your

values more effective than before? Can you offer a rational account of your professional

learning?" (1996, p.108)

In terms of this project, self-validation took the form of the keeping of regular reflections in

the form of a Reflective Journal which detailed my perceptions on the programme's

development. It considered three levels:

- ○ Factual- focusing on the facts and the mentoring procedure.

- ○ Prudential- focusing evaluation of the mentoring and student response.

- ○ Justifactory- providing rationale for actions

This journal is my evidence of a systematic enquiry that I did the things I set out to do.

3.10.4 Peer Validation

According to McNiff and Whitehead, peer validation occurs when "you subject your

subjective opinion to the critical evaluation of others" (2009, p.95). Peer validation took the

form of observation by the principal, the completion of the teacher reflection sheets and

regular teacher meetings. These measures were used to facilitate open and honest evaluation

of the project by the other participants. Regular meetings with the principal to discuss the

project also acted as a form of validation with the principal assuming the role of critical

friend.

3.10.5 Learner Validation

Pupil progress was monitored using individual semi-structured interviews, reflections sheets

and a focus group. All three qualitative methods on their own merit are susceptible to bias

and subjectivity and were therefore used collectively for the "corroboration of findings and

for enhancing the validity of data" (Denscombe, 1998, p.86). The standardised CAT3 tests and DRT tests were used to gauge students' ability initially to ensure we had the correct sample. These students' perceptions of the project were measured using the methods outlined earlier.

3.10.6 Triangulation

Because of the mixed methods approach that was adopted for the purpose of this study, the data needed to be triangulated. According to O'Donoghue and Punch (2003, p.78) triangulation is a "method of cross-checking data from multiple sources to search for regularities in the research data." Cohen and Mannion (1994, p.238) outline that triangulation is "mainly concerned with the field of education". Patton (1990) identifies four main types of triangulation which can lead to verification of results. These include: methods triangulation, triangulation of sources, analyst triangulation and theory triangulation. For this project, I chose to use triangulation of sources because, as has been outlined above, I have acquired data from a variety of sources. The data will be triangulated with each of the different groups of participants providing a minimum of three different forms of feedback. The data will be further cross-checked by checking to see if the experiences of the students corresponded with the responses of their parents and the teacher mentors.

3.11 How Can I Ensure That Any Judgements I Might Make Are Reasonably Fair and Accurate?

This will be done by ensuring that the research is conducted in an ethical manner and that the findings are as far as possible not invalidated by research bias

3.11.1 Ethics

As this is a study that involves human subjects, there were many ethical considerations involved. I submitted a notification form to the ethics committee at DCU in October 2009. Following some small suggested changes, approval was received from the ethics committee. (Appendix D). Having said this, throughout the research I was always conscious of having young people involved in the project and ensured that ethical procedures were followed at all times.

Prior to each interview, the interviewee was informed again of the nature of this research study. A letter was sent to all interviewees requesting their permission in being involved in the study (Appendix C). Interviewees were informed that participation in the interview process is completely voluntarily and participants can decide to withdraw at any stage. Confidentiality and anonymity was ensured throughout however as the ethics committee pointed out it would be unfair to offer a blanket assurance of anonymity as in a school community it would be possible that the identities of the subjects could be ascertained. Interviewees were informed that if they wish a copy of their interview transcription and/or a copy of the final research document, the researcher would forward when completed.

One area that was of particular concern to me was the issue of a power dynamic between students and teachers. A considerable worry for this research would be that students would give feedback of a positive nature because of this power dynamic or that they would participate in the project because they did not feel they could say no. I did my best to counter this concern in the manner that will be explained below.

Firstly, I introduced the project to the parents as I felt this would give the children an opportunity to decline to participate if they did not feel confident enough to tell me that they

did not want to be involved. Of course, this threw up the issue of parents seeing the value of such a project and insisting that their child be involved. I did my best to counter this my emphasising to the parents that it would only be beneficial to the students if the students were involved on a voluntary basis.

Also at every step, I ensured that the pupils knew that their participation was voluntary and that they could withdraw at any stage. Finally in terms of the power dynamic and feedback from the pupils, I felt that anonymous questionnaires were the only way of ensuring that the feedback from the students was not invalidated. Obviously there still remained a risk of students not being honest in their responses but I felt that an anonymous questionnaire would at least give students to opportunity to express themselves if they are not comfortable doing so in an interview or focus group. Therefore while I was aware that they are imperfect by nature as they "are not neutral" and can "sometimes be misleading" (McNiff, Lomax and Whitehead, 1996, p.98) I still felt that the anonymous questionnaire was the best way to handle the issue of the power dynamic.

3.11.2 Research Bias

One of the criticisms levelled at action research is that because the researcher is an active participant in the research then the prospect of research bias is more than one might find in a positivist research project. While I endeavoured to be as objective as possible during the conducting of the semi structured interviews and the construction of the questionnaire I acknowledge that my own beliefs still inevitably colour some of the research. Phillips (1990, p.20) draws our attention that the general viewpoint is "the term objective is commendatory, while subjectivity carries negative connotations". This, however, may not be the case. Phillips (1990 p 35) argued that "Objectivity is the label the stamp of approval that is used for

inquiries that are at one end of the continuum, they are enquiries prized because of their great care and responsiveness to criticism with which they have been carried out. Inquiries at the other end of the continuum are stamped as "subjective" in that they have not been sufficiently opened to the light of reason and criticism. Most humans require are probably located somewhere near the middle, but the aim should be to move in the direction that will earn a full stamp of approval".

Ellis and Flaherty (1992, p.103) acknowledge subjectivity when they "call for the use of one's own emotional experience as a legitimate object of sociological research to be described, examined and theorized. In this perspective, focus on researchers and their feelings during research situations in particular fields of interest". They further argue that "We see the process of subjectivity as having an existence sui generis – an existence that cannot be reduced to "more basic" forces in the mechanics of physiology or the dynamics of interpersonal relations" (Ellis and Flaherty, 1992, p.6). Being aware of the possibility of my own personal bias I did endeavour to be as objective as humanly possible in the construction of the questionnaire and when devising the interview schedule. I then took particular care with each interview transcription so as to report accurately and honestly the attitudes, views and opinions of the interviewees.

3.11.3 How Will I Change My Practice in the Light of My Evaluation?

The answer to the final question will be dealt with in the conclusion and recommendations sections once the data has been analysed.

3.12 Conclusion

This project, therefore, took the form of an education action research project. Mixed methods of data collection were used; the vast majority of which were qualitative. Change occurred over three reflective cycles. Every effort will be made to triangulate all findings and to ensure the validity of research. Every effort will be made to ensure the integrity and validity of the research. In the next chapter the data gathered will be analysed and following this conclusions and recommendations will be drawn.

CHAPTER 4

Data Analysis and Findings

4.1 Introduction

Information about how the data analysis process was conducted and the resultant findings are presented in this chapter. The findings that emerged from that data are then identified in the key areas of the study; gifted and talented education, positive psychology and metacognition and mentoring. Findings will also be identified regarding the management of the project through a distributed leadership and communities of practice frameworks.

4.2 Management and Analysis of Data

"The management of data is like the organisation of memory, consisting of three parts: storage, encoding and retrieval" (McNiff, Lomax and Whitehead, 1996, p.80)

Bogdan and Biklen define qualitative data analysis as:

> working with data, organizing it, breaking it into manageable units, synthesizing it, searching for patterns, discovering what is important and what is to be learned, and deciding what you will tell others (1982, p.145).

As has been outlined in the methodology chapter the data has been collected using a variety of qualitative means. The stages of data analysis as outlined in section 3.10.1 were followed.

Taylor- Powell and Renner (2003) emphasise the importance of firstly really getting to know your data telling us that "Good analysis depends on understanding the data. For qualitative analysis this means you read and reread the text". They also recommended that the research question was revisited in order to focus the analysis that followed. In the case of this research

this led to two approaches in the initial analysis. I explored the data with some preset categories in mind doing what Taylor- Powell and Renner describe as starting "with a list of themes or categories in advance and search the data for these topics" (2003 p, 3). However, I also wanted to allow for emergent categories- finding themes and issues that emerge from the data, things that I may not have already considered- so I used a system that grounded theorists refer to as open-coding for this. In this case, the coding was a heuristic tool.

> Analysis begins with identification of the themes emerging from the raw data, a
> process sometimes referred to as 'open coding'. During open coding, the researcher
> identifies and begins to name the conceptual categories into which the phenomena
> observed will be grouped. The goal is to create descriptive, multi-dimensional
> categories which form a preliminary framework for analysis. Words, phrases or
> events that appear to be similar can be grouped into the same category. These
> categories may be gradually modified or replaced during the subsequent stages of
> analysis that follow (Hoepfl, 1997).

The first step in the data analysis, therefore, was open coding as it was defined by Hoepfl. Coding is used to break down the data initially.

> At first the data may appear to be a mass of confusing, unrelated, accounts. But by
> studying and coding (often I code the same materials several times just after
> collecting them), the researcher begins to create order (Charmaz, 1983, p.114).

As a means, therefore, of putting order on the data, coding was used. Key words and phrases that emerged and that appeared to be similar e.g. 'couldn't be bothered', 'too lazy' or 'lacked motivation', 'disengaged' were grouped together and coded using the label 'Mot-' for motivation with a minus sign indicating that the students said something negative about motivation. For the purpose of coding and labelling, post-it notes were used. These were

colour coded so that a visual picture of themes would also emerge and the reoccurring

emerging themes could be grouped together and begin to form a preliminary framework for

analysis. This is in-keeping with Cohen, Mannion and Morrison (2000, p.147) who indicate

that data analysis involves "making sense of the data in terms of the participants definitions

of the situation, noting patterns, themes, categories and regularities" while Gough and Scott

(2001, p.1) tell us that the analysis of data begins with the identification of key themes and

patterns.

 As was mentioned in the example above labelling was used to process the data. I have

included below an example of how the labelling and coding occurred with one piece of

student data in Figure 4 below. The original coding was conducted using post-its but these

would not scan effectively so I have transferred the codes directly on the transcript. I have

also included a table for interpreting the codes in Table 2.
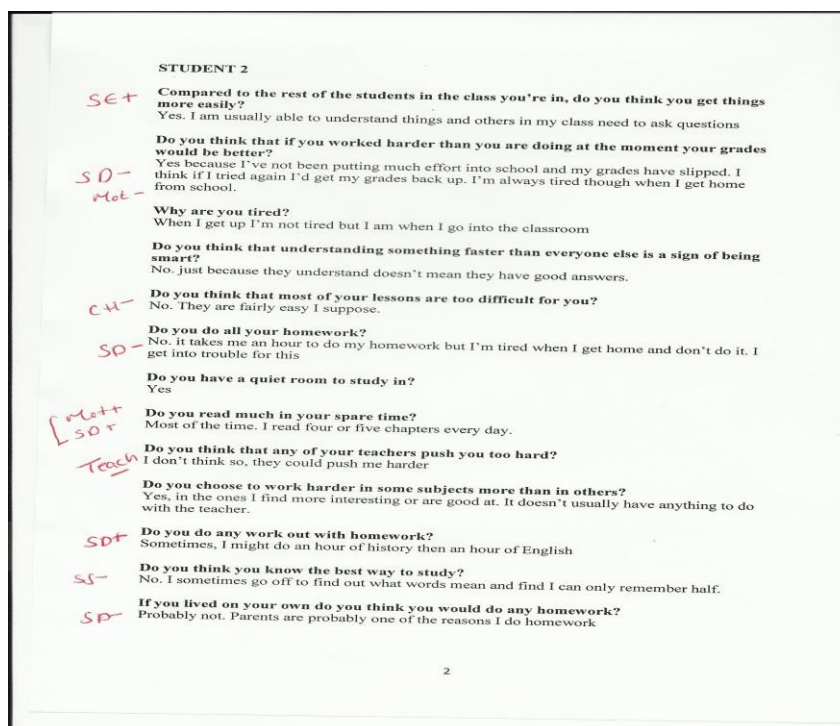
Figure 4: A sample of data with the codes used.

Code	Meaning of code:
SE+	The student displays self-efficacy
SE-	The students displays a lack of self-efficacy
SD-	The student displays a lack of self-discipline
SD+	The student displays self-discipline
Mot-	A lack of motivation is evident.
Mot+	The student appears to be motivated.
Teach +	The student holds his/ her teachers in high regard/ says positive things about them.
Teach -	The student does not hold his teachers in high regard.
CH-	The student does not feel they are receiving appropriate levels of challenge.
CH+	The student feels his/ her lessons are appropriately challenging.
SS+	The student is satisfied that he/ she knows how best to study.
SS-	The student does not believe he/ she knows how best to study.

Table 2: Sample of codes used in data analysis.

 Once the labelling had occurred sorting of the data took place. While the coding and

labelling was a means of breaking down the data, sorting can be seen as a means of putting it

back together in a manner that makes sense. "Sorting the data should provide an archive of

case records that can be used as primary source material" (Stenhouse, 1978, p.36). As the

samples of data were being coded using the labels, recurring ideas began to emerge. The labels and codes were useful to see what dominant themes were emerging and these were grouped together and an effort was made to make meaning of these. Generally the dominant findings could all be placed under one of the four main categories that were outlined in the literature review. For this reason the findings will also be structured using similar headings again in this instance: gifted and talented students, positive psychology mentoring, and the use of a distributed leadership model and community of practices.

Throughout this chapter the retrieved data will not only be analysed but it will be used to identify findings that emerge from that analysis. According to McMillan and Schumacher, "Making sense of the data depends largely on the researcher's intellectual rigour and tolerance for tentativeness of interpretation until the entire analysis is completed" (2001, p.462)

An effort was made to triangulate the findings. This was done by cross-checking the emerging findings to see if they came from more than one (usually three) different source. An example of this would be where the pupils, their parents and the teachers in general identified a lack of motivation as being a key reason as to why the pupils were underachieving. In a similar vein, if a finding was identified that only pertained to the pupils' own experiences and could not therefore be corroborated by another source I tried to ensure that the findings emerged in more than one manner from the source for example that the pupils gave feedback in writing as well as through focus groups and individual interviews. Triangulation is an important aspect of research. Altrichter et al. (2008, p.147) contend that triangulation "gives a more detailed and balanced picture of the situation."

4.3 Gifted and Talented Provision

As has been highlighted above and outlined in detail in the methodology section, the findings regarding gifted and talented pupils were ascertained from a variety of sources. The students themselves were interviewed at the start of the process and filled in questionnaires at the end. The questionnaires were filled in anonymously. Focus group interviews, informed by the findings of the questionnaires, also occurred with the pupils at the end to tease out any issues that may have arisen in the questionnaires. The different findings emerging from the data were then checked for consistency across those three separate means its acquisition. Obviously when interviewing and in focus groups, the pupils' identities were known to me but for them to achieve confidentiality within this study they will be referred to as S1 (student one), S2 (student 2) except for when I am referring to data acquired from the questionnaire which they filled out anonymously. I have labelled each questionnaire A, B, C etc and as a result the pupils will be referred as SA (student A) when referring to those findings. I do not want to refer to them as S1 or S2 because two statements referred to as coming from S1 may not have been contributed by the same student.

The parents met as a group at the start and at the end of the process and they too filled in a questionnaire giving feedback. The meetings with the parents were minuted and I noted down my reaction after initial meetings with the parents in my reflective diary. The parents opted to sign their questionnaires and consequently there is no need for me to refer to them in two different fashions.

The teachers who acted as mentors met regularly and these meetings again were minuted. They also completed two written reports during the process and were asked to keep a

reflective diary also. The teachers' keeping of the reflective diary proved to be erratic and the data was not therefore fully reliable. Three of the teachers were also interviewed at the end of the process. Teachers will be referred to as T1, T2 etc. The findings relating to gifted and talented pupils outlined below are generally supported by the mentors, mentees and their parents. The initial finding relating to Betts and Neihart's (1988) profiles focuses on teachers' perspectives only however as the profiles were not presented to the pupils and their parents.

4.3.1 The Usefulness of Betts and Neihart's Profiles

The teachers were acquainted with Betts and Neihart's Profiles of Gifted and Talented Individuals (1988) in one of the initial meetings. This is recorded in the minutes of the meeting on 3rd September 2009.

> The teachers were given Betts and Neiharts Profiles of Gifted and Talented Individuals as outlined in the NCCA Guidelines. They were told that they could use the profiles as a means of gaining insight into the characteristics of the students they were mentoring and to identify approaches that might work with these pupils (Appendix H p.1).

Most of the teachers present seemed happy to use the profiles to assist them in gaining a greater understanding of their mentee. The following was noted in the minutes of the meeting dated Thursday September 3rd 2009:

> Teacher 2 (T2) commented that he was surprised by some of the profiles as he had not thought of gifted and talented pupils in this way before. T3 agreed. She said that the profiles would come in useful (Appendix H p. 2-4).

The general feeling of the group on that date was that the profiles would prove to be a useful tool. Teacher 1 (T1) disagreed with the use of the profiles as he said he was uncomfortable with them. In the minutes it is noted that "T1 said the idea of labelling pupils at all was something he had an issue with" (Appendix H, p.2).

Based on the findings at the end of the process seven out of the eight teachers involved found the profiles to be useful. In the final reports submitted by the teachers T2 said "The profiles made me look at X in a different way. I was able to put myself in his shoes". While T6 claimed:

> The profiles gave me an idea of what strategies could work to help X. Also I found them good because they helped me to see why X might not be performing despite having such great ability (Appendix I p.8).

Another interesting finding was that one teacher, T7, found sharing the profiles with the pupils themselves to be a useful strategy. This was something the group had not considered but that he shared with us during a meeting in May after he had tried it out. He rephrased the characteristics as outlined in the profiles, in more accessible language and asked the pupil if he could identify himself among the profiles. The pupil chose a category that the teacher would not have thought he belonged to. The teacher explained to the pupil why he thought he possessed characteristics typical of a different profile. The teacher found the discussion to be useful in developing self-awareness in his mentee.

> X was surprised when I identified that I thought he was a challenging. He saw himself more as an autonomous learner. I explained to him what qualities I saw in him and how he could improve his approach to learning and become an autonomous learner. I

also used his summer test result to back up what I was saying to him. I think this really registered with him (Appendix H p.6).

Teacher 1, on the other hand, still refused to use the profiles at all. He said "I am just uncomfortable about labelling pupils at all. They are who they are. We can't put them in a box" (Appendix H p.6). While this teacher's opinion was taken on board by the group, there was a general feeling among the others that the profiles were useful. Teacher 5 argues: "You just need to look at them as fluid. Always moving. The label doesn't have to stick. The aim is to move the pupils on. The profiles give you an insight into how to do that" (Appendix H p.6). All the other teachers agreed that they would still use the profiles if mentoring in the future but they would also use them to inform their teaching. T2 said: "I think they would be great for any teacher. I hadn't a clue that gifted and talented pupils could be so different from one another. It seems silly now but I suppose I guess I thought they were all kind of the same as each other". (Appendix H p.6)

The overall finding therefore is the Betts and Neihart's profiles are a useful tool to assist teachers in deepening their understanding of the difficulties that more-able learners can face and strategies that can be used to address these difficulties. They do need to be used with caution, however to avoid judging or labelling pupils too harshly or making presumptions about pupils.

4.4 Reasons for Underachievement in Gifted and Talented Pupils

Many reasons can be identified for pupil underachievement. The pupil survey identified motivation as a significant factor as is demonstrated in Figure 5.
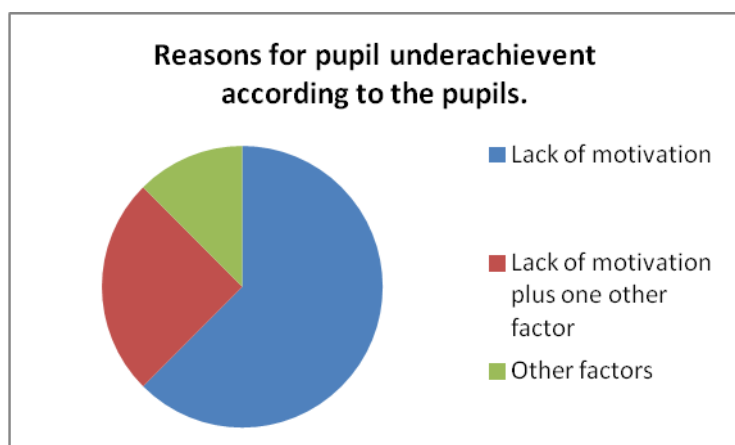
Figure 5

4.4.1 Motivation

Deborah Eyre presented the equation outlined in the literature review at the Centre for Talented Youth Ireland Conference in 2008. The equation (Figure 1) identifies all the different factors that need to be in place for a gifted and talented pupil to achieve his or her potential. This equation was presented to the students in their pre-mentoring interview. Factors identified in the equation were explained to pupils if they were unclear of the meaning. When asked the question as to which of these factors already existed in their lives and which were missing, seven out of eight students acknowledged that they lacked motivation. Five felt that they lacked motivation but that everything else was in place while two felt that motivation and one other aspect was missing. One pupil felt that they lacked other factors aside from motivation.

Student Three (S3), for example, said: "I have potential, opportunity, support from parents but not really motivation. I only study if I have to" (Appendix J p.5) while Student One (S1) for example said: "I probably don't have motivation as I'm always bored which makes me not want to do it" (Appendix J p.3). Student Four (S4) said "I definitely lack motivation but I

also think I don't have enough support. So I am missing two things really" (Appendix J p.7). Interestingly Student Five (S5) also did not feel that motivation was the missing ingredient. Their response was when asked which of the aspects of the equation they already possessed was: "Potential, self-motivation, not opportunity or support". This response suggested that at least two of the pupils did not feel that the education that they were receiving provided sufficient support to succeed while at least one did not feel provided with enough opportunities.

The parents also identified a lack of motivation as being a primary factor as to why their child was not achieving. In fact all eight parents acknowledged this at one point either in writing or verbally in the meeting. Some parents were very concerned with the lack of motivation their child exhibited. It is noted in the minutes of the initial meeting that one parent said that she was very worried about her son's lack of motivation and that she struggled to get him out of bed for school in the mornings. One parent said "He doesn't open a book. His grades have fallen. I am very worried about him" While another parent said: "That sounds fantastic. He definitely would benefit. I can't get him to do any work at all. If I nag him anymore he will call child line". At the initial meeting there was a consensus among the parents that motivation was a key ingredient that was missing (Appendix K p.2). In the minutes of the mentoring meeting from October 2009, I have noted that: "T3 commented that she was surprised by the lack of interest and motivation her mentee had around school. There was a general consensus that this was the case. T2 said that he already found it a bit frustrating that he was dealing with a boy of such potential ability but that the pupil clearly did not have any motivation" (Appendix H p.4).

I have also noted in the same minutes that "It was decided that the uniting factor that all the students being mentored shared was their lack of motivation". The teachers also noted this in the written reflections that they filled in at the end of each session. T6 wrote "I don't know whether she is taking in what I am saying. She listens and nods and says she is doing it but she seems to have no interest. No motivation to do well what so ever". As can be seen in Figure 1, Eyre identifies motivation as a necessary component for success among gifted and talented pupils. This was echoed by McCoach (2002), Ford et al (2005) as well as by Foster and Matthews (2005). Reasons why some more-able students may lack motivation have been considered in the literature review in section 2.4.1 where intrinsic and extrinsic motivation is considered. Many more-able students get used to being praised for good work when they are young and get used to extrinsically motivating factors. When these extrinsic factors are not as apparent in secondary school motivation could potentially dwindle. A further reason for lack of motivation could relate to the students' lack of self-efficacy which is dealt with further in section 4.4.3. A final reason for a lack of motivation could stem from the students' perceptions of intelligence as outlined in 2.5.2. This relates to students' perceiving that their intelligence as fixed and therefore not seeing a use in working towards expanding their minds or being afraid to test the boundaries of how smart they are. This is examined further in 4.4.3 and 4.7.1.

A further finding from this was that it came as a surprise to many of the teachers involved mentoring that pupils with such high ability could lack motivation to such a great extent. Again this finding is supported in literature when Ford et al suggest "Poor motivation among gifted students seems paradoxical, because intrinsic motivation is considered a distinguishing characteristic of gifted students" (p.159). However as they go on to point out this intrinsic motivation is only a characteristic of those gifted and talented pupils who are achieving their

potential. The gifted and talented students in this project were underachieving and one of the reasons for this underachievement was primarily, according to the data from the pupils themselves, their parents and their mentors, because they lacked motivation.

Another finding, therefore, emerging from the data acquired from the teachers was that they were, for the most part, surprised that the pupils were so unmotivated. The teachers involved in this project had been given information about more-able pupils and had agreed to mentor these pupils because they were underachieving and yet they were surprised to find these pupils to be unmotivated. It was as though the label gifted and talented superseded all others and teachers automatically brought with them a set of preconceived ideas as to what to expect from the pupils. I found this to be quite alarming and it demonstrated to me that many other mainstream teachers who did not have the luxury of being informed about the needs of more-able pupils could also bring with them misconceptions and therefore would not be addressing the needs of these pupils in the manner in which they need to be addressed.

The teachers were expecting pupils to have certain characteristics that one might attribute to a stereotype of giftedness. I have noted in the minutes of the October meeting that T2 said "I actually had to lower my expectations when dealing with him. He was a lot more normal than I thought he would be" (Appendix H p.4) while another teacher expressed some disappointment that they were going to be doing what she considered to be very basic skills in the mentoring session. I have noted in the minutes that T6 expressed some disappointment in the process. She had thought the mentoring was going to be towards what she considered more high level skills.   Indeed, the findings here show that in many ways some gifted and talented underachievers may not be too dissimilar from other adolescents. In the same way as we cannot consider all teenagers in the exact same light, gifted and talented pupils cannot be

considered a homogenous group sharing exact character traits with other gifted pupils.

However this seemed to be what some of the teachers expected and could possibly be a

misconception other teachers share. Having said that, it is possible to make some

generalisations about a particular group of pupils and in this case the factors that the data

suggested contributed to the lack of motivation are examples of such generalisations and

interestingly some of the characteristics are not peculiar only to gifted and talented students

but could often be considered true for their less-academically able peers.

When during the pre-mentoring interview with the pupils as well as in the meeting with their

parents, I explored the reasons why these pupils may lack motivation, the following reasons

emerged: it was often because they lacked the ability to organise themselves or to study

effectively. Another reason was because they lacked self-efficacy while with some pupils it

was a case of a lack of self-discipline. Some pupils only needed to work on one of these

areas, for others it was two while for others it was all three. This again highlights the need for

the mentors to know their mentee and to address their needs accordingly.

4.4.2 Organisation and Study Skills

A key reason identified as a reason for pupil underachievement was a lack of organisation

and efficient study skills. I believe this inability to structure and organise their learning was a

reason why many pupils lacked motivation. When asked the question: Do you think you

know the best way to study? Six out of eight of the pupils answered no and went on to

explain that they had never been given any instruction with regards to studying and how best

to organise and structure their study. Of the two who said yes, S8 said "I know how to study

but I just never want to or I don't have time" while S6 claimed to know how to study when

she said "I write everything out and learn it like that". Even though she claimed that she knew

the best way to study, her answer demonstrated that she could also benefit from direction regarding organising her study. The parents also identified some instruction with regards to how to study as a need for their children. One parent said during the initial meeting "I don't think she actually would know where to start" whereas another parent said:

> He is hopelessly disorganised. There are bits of him all over the place. The amount of notes I get in that journal. Just because he didn't have this book or something else. I don't know what he is thinking about half the time (Appendix K p.2)

This is in keeping with the findings of Mc Coach and Sigele' (2005) who argue that "Because gifted students often progress through the early years of school without being challenged, they sometimes fail to develop the self –management skills that other students master" (p.23). Therefore when things get more challenging in the move to secondary school which involves more subjects, a variety of teachers and moving from class to class the pupils may lack the skills necessary to cope with this challenge. Interestingly, seven out of the eight pupils were open to learning how to organise themselves as they clearly knew they had a problem with it. Again McCoach and Siegle (2005) account for this because they state that "Students are more likely to internalize self-regulatory skills when they need those skills to solve the problems at hand". (p.23) In the case of this study, the pupils were facing into their Junior Cert year, they were underachieving and many were frustrated because they struggled to organise the demands of the thirteen subjects they were studying as well as constantly moving from class to class in a busy secondary school. They were also finding themselves in trouble with teachers and at home. They were, therefore, receptive to the assistance as they perceived it to be a need that they had. Metacognitive strategies were explicitly taught to pupils through the mentoring process. The outcome of this intervention will be outlined in a later section on metacognition strategies.

4.4.3 Lack of Self –Efficacy

Another finding, one that surprised me, was the number of the students surveyed who lacked a knowledge and awareness of their own ability. At the initial interview the pupils were asked the question: "Do you know why you were selected to participate in the project?" Only three of the eight mentioned ability or potential ability. S1 said "Because I have great ability but am under achieving" while S4 said "I get good grades without putting much effort in so I guess teachers must think I could do even better". The remainder of the pupils said they did not really know why they would be chosen.

One of the parents gave an account of the level of surprise her daughter felt at being selected for the programme. It is noted in the minutes that the parent said: "She kept repeating 'They picked me. I can't believe they picked me". (Appendix K p.2) The teachers also identified a lack of self-efficacy as a reason why they felt pupils were underachieving and were surprised with their discovery. "Despite the façade, he is actually very afraid to take any risks. He does not want to risk failing and this is why he lacks the belief to push himself" one teacher wrote of a pupil who many other teachers would have assumed was very much aware of his ability. T3 said: "I was amazed that she really did not seem to have a clue what she could do if she put her mind to it". A parent acknowledged this in her written feedback sheet at the end of the process reflecting that a benefit of the mentoring was: "Gave confidence to X in knowing that other people, apart from her parents, believed she had ability that she herself was doubting" (Appendix K. p.3). When this was teased out in the focus group, five parents spoke about the fact that they acknowledged the ability of their children regularly but they thought their children were still not aware of how much potential they had. They felt that, as parents, the impact of what they said to the student was minimal compared to the potential impact a teacher could have on a student.

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Interestingly another pupil who outwardly would appear to be and who teachers thought was very confident and who was unquestionably bright also doubted his ability at times according to both his mentor and his mother. The teacher who was mentoring him said "he was very worried he would not be able to live up to expectations" while his mother said "at home he would get very worried about school. He worried all the time about not being good enough. He has been like that since he was a little boy" (Appendix K p.2). This came as a particular surprise to many of the teachers involved. Obviously, this could be typical of the lack of confidence that underpins a lot of the adolescent experience but the key to this finding is that the majority of teachers would not have been aware that this boy felt like this. The teachers in the mentoring group who knew him were surprised and that he felt like this because there was no evidence of it in school and because he was such a highly able individual, they just assumed he was confident about his ability. This challenges us as teachers to look beyond the exterior and to positively reinforce all students even those we believe to be very confident about their ability.

Because these students had not been achieving as high levels of success as they should have been due to the fact that they had not been fully utilising their ability, many of them lacked self-efficacy- a genuine belief that they could achieve their goals. Others were afraid to challenge themselves because of a fear of failure which Siegle and McCoach (2005) and Mueller and Dweck (1998) tell us in quite common among under achieving gifted and talented pupils. The pressure of expectation can be enormous for the pupils. One parent reported at the parent focus group that her daughter was getting stressed and was suffering from tension headaches such was the stress she felt about school. The parent felt a lot of the pressure came from this pupil's fear of failure particularly because there was such high

expectation for her to do well. This pupils mentor also acknowledged this after the initial mentoring meeting saying "She puts so much pressure on herself. She seemed so anxious at the first mentoring session. We actually had to do breathing exercises to calm her down a bit" (Appendix H p.4). Teachers often assume that the bright pupils know that they are bright but this is not always the case and even when they do know they possess ability they may be afraid of testing how much ability. This can all contribute to a lack of self-efficacy. One aspect of the mentoring involved the use of positive psychology strategies in an effort to help pupils to develop their self-efficacy. The outcome of this will be explored in the section dealing with positive psychology.

4.4.4 Lack of Self-Discipline

Another contributory factor to a lack of motivation in students was their lack of self-discipline when it came to study. Self-discipline is in essence the ability to motivate oneself as opposed to being motivated by others. Ford et al (2005) point out, that many of us assume that intrinsic motivation and consequently self-discipline is a defining characteristic of being gifted. The teachers involved in the mentoring for this study believed that because the pupils had ability they should be intrinsically motivated to use it. The pupils identified in this study fell into what the NCCA guidelines suggest is the category of exceptionally-able pupils and yet at the start of this project of the eight pupils being mentored two pupils were not completing their homework regularly. Four of the students were doing homework only. While two were doing homework and some study, even this was minimal compared to what it should be in third year. When asked the question: "Are you working to capacity?" S1 responded "No, I don't work hard enough and could get better grades. I do about an hour of homework and half an hour of study" while S7 responded "I do work but I really leave things to the last minute" and S5 said "I try to get my homework done at school if I can. I don't do

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any study in the evening and sometimes I do my homework just before the lesson starts"
(Appendix J p.2-9). It is clear that the pupils involved lacked self-discipline but to varying
degrees. This would suggest that intrinsic motivation could only be viewed as a defining
characteristic of gifted pupils who are already meeting their potential. The lack of self-
discipline seems to have been caused by a variety of factors. S4 simply said "I'm lazy" while
S3 "I don't see a point to doing homework or study this early in the year". S3's response is
typical of underachieving gifted pupils according to McCoach and Siegle (2005) who tell us
that "We need to help students see beyond the present activity to the long term benefits it
produces" (2005, p.22). An effort was made to do as McCoach and Siegle suggested through
getting the students to embark on a career investigation as part of the mentoring process.

As I referred to above, teachers evinced surprise at this finding when it was shared with them.
Firstly they were amazed at the students' honesty in answering but there was a general
consensus that these responses were not good enough i.e. that a pupils with ability should not
be lazy. However if a pupil has not grown up in a culture where school and school
achievement are celebrated or if that pupil does not have a hardworking role model then it is
understandable that he or she might be lazy. Similarly the pupils might be using laziness to
mask fear of failure a common trait of more-able pupils as was outlined in the section on self-
efficacy. The aim of the mentoring was to see if we could move that pupil on and make him
see a point in working hard. This was done through the positive psychology techniques that
will be outlined later.

One uniting factor for all pupils was that if they did exhibit any motivation at all, it appeared
to come from extrinsic motivational factors. This finding is very in keeping with other
research conducted around gifted and talented pupils. (Siegle and McCoach 2005; Betts and

Neihart 1988). When asked the question: "Do you think it is your teachers' responsibility to make you work at school?" six out of eight of the pupils responded yes. The other two responses were more equivocal. S6 responded "Kind of. They could push us harder I suppose but I don't know if that would make any difference" while one responded with "I don't know. I haven't really thought about that before". When asked the question: Do you choose to work harder in some subjects more than in others? All of the pupils answered yes and when pushed on this six pupils conceded that it was due to their relationship with the teacher of the subject and whether or not they perceived the teacher to be effective. S4 responded: "Yes, it depends on the teachers and whether they help you or not" S4 "If I respect the teacher I will work for them". Two pupils, on the other hand, worked harder in the subjects that they liked or that they found interesting. S5: "Yes, I work in the ones I find more interesting or are good at. It doesn't usually have anything to do with the teacher" (Appendix J p.2-9).

The pupils all were asked "If homework was optional would you ever do it?" Six out of eight pupils conceded that they would not while S4 said it "Depends on what is coming up" S2 said "Probably not. Parents are probably one of the reasons I do homework" while S5 "Probably not. I am too lazy". The literature review makes reference to Duckworth and Seligman's paper: "Self-discipline outdoes IQ in predicting academic performance of adolescents" (2005). The fact that all work incentives and motivation appeared to be coming extrinsically for these pupils was worrying. This lack of self-motivation would be in-keeping with the Betts and Neihart profiles outlined in the literature review. This lack of self-motivation was a characteristic of The Successfuls who were the most commonly found profile according to Betts and Neihart.

Positive psychology and the teaching of metacognitive strategies were used in the mentoring sessions to try to get pupils to develop more self-discipline. These will be explored in the next section.

4.5 A Twice Exceptional Student

One very interesting and surprising finding that emerged with regards to one particular student was a finding that related to the area of what Betts and Neihart (1988) call the double labelled or the Special Education Support Service (SESS) call dual exceptionality. This student's name has been changed to James and the teacher's to Tom for the purpose of explaining this finding and to protect the identity of the child.

James was identified as a potential candidate for mentoring when we looked at his CAT3 and DRT scores and identified that he was in the top 1 percentile for mathematical ability and in the top 10th percentile for verbal reasoning ability. When we examined his summer test results, he was underachieving quite dramatically and the comments from the teachers all indicated that they were unhappy with his level of commitment to his school work. This they claimed was exhibited through a lack of organisation, not doing homework, not paying attention in class, untidy work. The list was quite extensive. James was mentored by Tom, a teacher from the learning support department. From the outset, Tom was concerned about James' performance and discussed this at the second meeting (Appendix H p.2-4). His concerns continued and Tom started to consider that James might have a learning difficulty. He spoke to James' mother who agreed to have him assessed by an educational psychologist.

James was diagnosed by a psychologist as having mild autism and dyspraxia. James was dual exceptional. However, this had not emerged earlier in his education. This could have been due to the fact that he was highly functioning and with his ability he was able to cope and mask his disability. According to Betts and Neihart (1988) this was one of the dangers for double labelled students in schools. James was often getting into trouble for poor organisation and forgetfulness. He was also often told off for not doing homework and was perceived as lazy by some teachers according to his reports.

Once James had been diagnosed, the school was able to apply for support hours. It was hoped that in the next school year, the school would be able to provide much more structured support for James. However, in some ways James missed out on opportunities to succeed because despite his raw ability in Maths as identified in the testing, James went on to sit the ordinary level maths exam in his Junior Certificate. This begs the question if James was identified and supported at an earlier stage whether or not he would have succeeded in fulfilling more of his potential in the state exams. Our discovery of James' dual exceptionality made me wonder if there are many more dual exceptional students go unnoticed in the education system.

4.6 Metacognition

The mentors were give the document that "Metacognition for the classroom and beyond: Differentiation and support for Learners" which was devised by Dr. Sarah McElwee for the Special Education Support Service (SESS) in September 2009. The mentors were asked to use some of the strategies as outlined with their pupils paying particular attention to 2.7 Self-reflection and evaluation techniques for learners, 2. 3 The SQ4R (Survey, Question, Read,

Relate, Recall, Review) Method of Reading and Studying, 2.4 K-W-L charts and 2.6 Concept

Maps (Appendix M). Teachers were also encouraged to set meaningful targets with their

pupils and to revisit these targets at each mentoring session. Teachers were also asked to

assist pupils in the creation of a study timetable so that they could plan their learning

appropriately.

After the project was completed when asked "What do you perceive to be the benefits (if any)

of your child participating in the mentoring project?" Six out of eight parents acknowledged

improved organisation and study skills. One parent wrote: "Organising skills. Self monitoring

skills. Setting realistic targets". The pupils also found the help they received with organising

and structuring their learning to be one of the chief benefits. Six out of eight pupils

acknowledged that the help they received to plan out their study was particularly useful. The

pupils were asked "What (if any) of the organisation tools did you find useful?" Student E

(SE) answered "I found study planning most useful because it set out a set schedule for my

study which I followed. I would not have been able to do this myself". Another pupil, SF,

also acknowledged that receiving help with their study planning was useful. In response to

the same question she replied "The study planning because it made me see what my time

frame was and how much time I had to spend on each subject" while SB claimed "Study

planning was the most effective for me. It helped me study efficiently and cover a lot more

work than I usually would. Mind mapping was helpful for science and English because it was

fast and easy to use and remember" (Appendix J p.7-12). SA, however, claimed "I didn't find

these organisation tools useful. I found that my own technique of learning by reading and

writing out what I had read works best for me". Interestingly, the pupil who wrote this still

acknowledged: "I do think I benefited from the mentoring project, mainly because I realised

that I now have a purpose to study for exams because they will affect my future". It was clear

that this pupil did not feel they needed input with regards to organisation but needed intervention with self-discipline so that she could, as McCoach and Siegle suggest, begin to value the outcome of education. Overall, this finding demonstrates that in the main even more-able students need to be taught organisation and study skills so that they can maximise their ability. Another aspect of these findings is that these skills can actually be taught and bad organisational habits reversed.
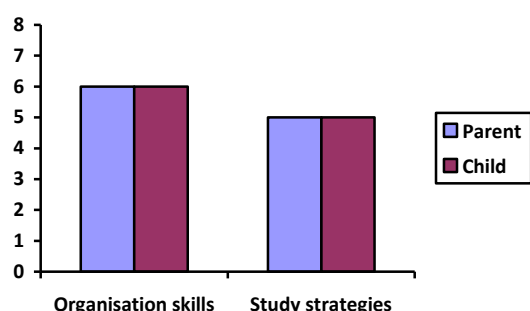
Figure 6: What do you perceive to be the main benefits of participation in the mentoring project?

A further benefit identified by both parents and students was that the mentoring, as well as helping the pupils to organise their study, it also helped them to put more structure on how to approach tackling a piece of their learning through strategies like the SQ4R method and target setting. As is evident in Figure 6, six out of eight students mentioned organisation skills as being one of the main benefits and five of the eight students acknowledged specific study strategies in their feedback sheets. Of the five feedback sheets returned by parents, they all acknowledged that helping students to put some structure on how to learn was beneficial. Parent one commented that the mentoring was beneficial for her daughter "By making her set short term and long term goals it made her think about what she was doing and helped her understand better what she could and should achieve through her school work" (Appendix K p.3) while another commented that "By showing her study and planning techniques and

making her aware of better time management and organisation her work became more focused" (Appendix K p.5)

The pupils also acknowledged this with one student, SH, stating that "The mentoring started to get me thinking about how I was doing my study. I didn't just start at the beginning of a chapter anymore. Now I asked myself questions first". Another student found a benefit in simply being organised in class. Student D claimed that he was "way more organised and definitely more content in school as I find I meet with far less conflict than in previous years" (Appendix J p.14). This was reinforced in both the focus group meetings. A parent of one student said that: "He really liked the check lists as they really helped him to get organised". The students also echoed this sentiment in their focus group meeting. Student 2 found that "I worry less about homework and study now because I have learned to plan ahead" (Appendix J p.18). In the focus group I pointed out to the pupils that they learn a lot about structuring learning in SPHE class so this should not be new to them. "We don't really think that what we do in SPHE is any good" said one student in response to this and another student said "No-one really takes SPHE that seriously. We don't link it up to what we are doing in our other subjects" (Appendix J p.18).

Interestingly when the question was put to the focus group as to why some students may not have acknowledged the help they received with structuring their learning on their feedback sheet, S2 volunteered. "I didn't have a problem organising myself. I knew how to do it but I couldn't be bothered". The other students did not offer alternative reasons but S2's response makes me question whether or not this was the case for the other two respondents who did not mention the help they received with structure. S2's response also highlighted the very individual nature of the pupils and again the need for teachers to have the freedom to change

tack to suit the needs of the pupils and to only use Betts and Neihart (1988) profiles as a guide.

A finding, therefore regarding structure, is that many more-able pupils underachieved because they did not structure their learning effectively and that the SESS metacognition document was a useful tool in addressing some of these issues. Once they were taught organisation, study and self-regulation techniques most of the students felt more in control of their learning. However the question remains as to whether this justifies the one to one input and whether or not this structure and whether organisation skills could be imparted successfully to class groups or smaller cluster groups? As outlined in the literature review one of the aims of the mentoring was to help students' cognitive development in an overt manner- to get them to think about their own thinking. The majority of pupils responded to this suggesting that there is a need for schools to work on getting pupils to organise and structure their learning more. Obviously, this should pertain to all pupils and not just the more-able, however. The manner of how best to do this is unclear; mentoring is a good opportunity to do this however it does not reach all pupils. The pupils in this study were not satisfied that SPHE was the appropriate forum.

The students' belief that SPHE is not the appropriate forum could potentially have been coloured by their experience of SPHE in their particular school context. In the school in which this study was conducted, many teachers taught SPHE in addition to their main subjects. Teachers might, therefore, only teach SPHE once or twice a week to two different classes in different year groups and therefore the teachers teaching it were not as familiar with the SPHE curriculum as they might be if it occupied more time on their timetable. If the school had a small team of designated SPHE teachers, then perhaps giving them a

background in this study could perhaps enhance the instruction of some of the elements addressed in this study through SPHE lessons.

4.7 Positive Psychology

The aim was to enable pupils to see that there was a direct correlation between effort and attainment and thus increase motivation and self-discipline. This was a recommendation from Siegle and McCoach (2005) who identified the need for pupils to value outcomes in their education. Another aim of the mentoring was to get pupils to extend themselves so that they would not be afraid of challenge. This was to be done through the development of resilience as outlined by Seligman (2000) and would only be successful if pupils' self-efficacy also developed. The hope was that once pupils were more engaged with their learning, they might feel more fulfilled and be happier in school as a result. Below, I have examined the effectiveness of integrating positive psychology into the mentoring process.

4.7.1 Positive Psychology to Improve Self-Efficacy

Teachers used targeted praise, visualisation techniques, target setting, career investigations and discussions in an effort to get the pupils to develop their self-efficacy. In some ways being selected for the mentoring project demonstrated that the school believed in the child's potential and this helped them to develop their self-efficacy. At the end of the process in their feedback sheets when asked the question "Why do you think you were selected to be involved in the mentoring project?" seven out of eight of the pupils acknowledged that they were chosen because they had academic ability that they were not using. Student C, for example said that he was selected to be involved in the project "because I believe I have a great amount of potential but lacked the focus or work ethic to achieve my potential" where

as Student B put it simply "because i was underachieving". This was a substantial increase from the initial number of three after the first interview.
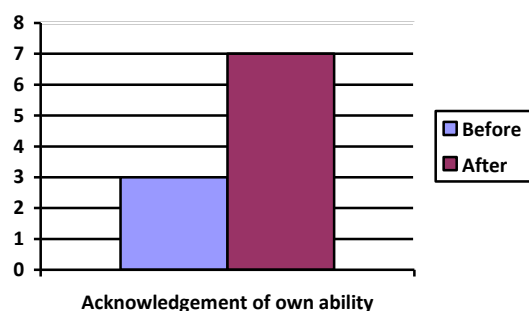
Figure 7: Increase in student self-efficacy

The data outlined in Figure 7 may obviously have also been coloured because they were writing their responses on this occasion as opposed to speaking to a teacher directly and could therefore express themselves more freely. Speaking to a teacher directly might have meant that they were not comfortable actually stating that they had academic ability whereas they might be more comfortable writing it down. I would argue, however, that to be able to acknowledge your ability to an adult even if it is in writing as opposed to face to face is evidence of self-efficacy.

The ideas that the pupils expressed in writing were further dealt with in the focus group. S2 said "I wasn't sure I was any good at school. I didn't think I would be picked for this. But when I was I could see that teachers believed in me a bit". Another pupil, S6, echoed his sentiment when she said "I think I might actually do well enough in school now" (Appendix J p.18). This was very much in-keeping with Parent 3 who wrote that she perceived the following to be a benefit: "Gave confidence to X in knowing that other people, apart from her parents, believed she had ability that she herself doubted". This sentiment was echoed by all

the parents on their feedback sheet and was reinforced at the focus group meeting. Parent 7 said "Secondary school is so different from primary school and it is so easy for students to get lost along the way. Being part of this project made X feel that the school recognised her ability and this spurred her on to work a bit harder"

Surprisingly, the students were able to identify this benefit of the mentoring themselves. Student 8 wrote in her feedback form "I couldn't believe that the school picked me for this. I didn't really think that anyone took much notice of me in the school". Teachers also reported that pupils' self-efficacy improved. T3 commented "I could see her growing in confidence from session to session as she felt that she had control of her learning". Parents too acknowledged a change in their children's attitude to their own ability. When asked "What do you perceive to be the benefits (if any) of your child participating in the mentoring project?" Parent 4 wrote, among other things, "Building of self-esteem". This was echoed by seven out of eight of the parents either in writing or at the focus group sessions.

To help students' develop more resilience the concept of stretch zones was shared with pupils. The aim was to get pupils to realise the need to push themselves out of their comfort zone and to realise that everyone no matter what their ability should be challenged in school. The mentoring handbook suggested that the teachers compare the pupil's brain to an athlete training. The idea was that if you don't exercise your brain, no matter how much natural talent you might have, you would not achieve optimum results. The idea was to move pupils from what Dweck (2006) called fixed to growth mind-sets. The other concept was the idea of failure and directly addressing pupils' fear of failure. Pupils were given a list of famous geniuses and the various failures they had to encounter before they succeeded. The idea was to help pupils to develop resilience to get them to see failure as a learning experience and to

value effort over achievement. One teacher acknowledged these as having really resonated with the pupil they were mentoring and interestingly this was the pupil who had been experiencing tension headaches such was the pressure she felt to succeed in school.

In their final questionnaires the pupils did not mention these devises specifically when commenting on aspects of the mentoring they found useful. However teachers anecdotally noticed a change in attitude in the pupils and I would argue that some of these techniques were used in a more subtle, less didactic way with pupils so when it came to writing up their findings they latched on to the organisation and study techniques as they had a more immediate, obvious, tangible and practical use.

Furthermore when asked the question: Do you think you have changed anyway this year as a result of the mentoring project? Five out of eight pupils mentioned that they were happier in school and six out of eight mentioned an academic improvement. Four out of eight mentioned improved relationships with teachers. The following responses were received; SC: "I believe I am a more cheerful and dedicated student as a result of the project", SB: "Yes I'm more organised and my behaviour has improved dramatically and my grades have gone up. I worry less about homework and study now because I have learned to plan ahead" SF: "Yes I have changed. I work harder in school and it has helped me to mature and focus. I am also a lot calmer in school and get on better with my teachers" (Appendix J p.10-17).

4.7.2 Self-Discipline

The hope was that once pupils were equipped with organisational tools and a belief in themselves self-discipline might naturally follow. There was only one issue left to address in this and this was ensuring that the pupils understood the importance of their school work. Teachers talked the pupils through the importance of doing well in their exams, the

consequences of not doing well and got the pupils to focus on a career goal. Five out of eight of the pupils commented on this as a benefit of the mentoring. SC said the project "gave me a chance to think about what are my goals and what my plans for the future are" while SA said "I think my attitude towards exams have changed in the fact that I know they are not just tests but tests that will influence my college course choice eventually" while SD very honestly concluded "I doubt I would have lifted a finger for the Junior Cert if I had not partaken. It made me realise there is actually a point to the exam and it's worth working for". Anecdotally the mentors remarked that there was some positive feedback from the class teachers regarding the work the students were doing in class.

The positive benefits of the mentoring project are shown in Figure 8.
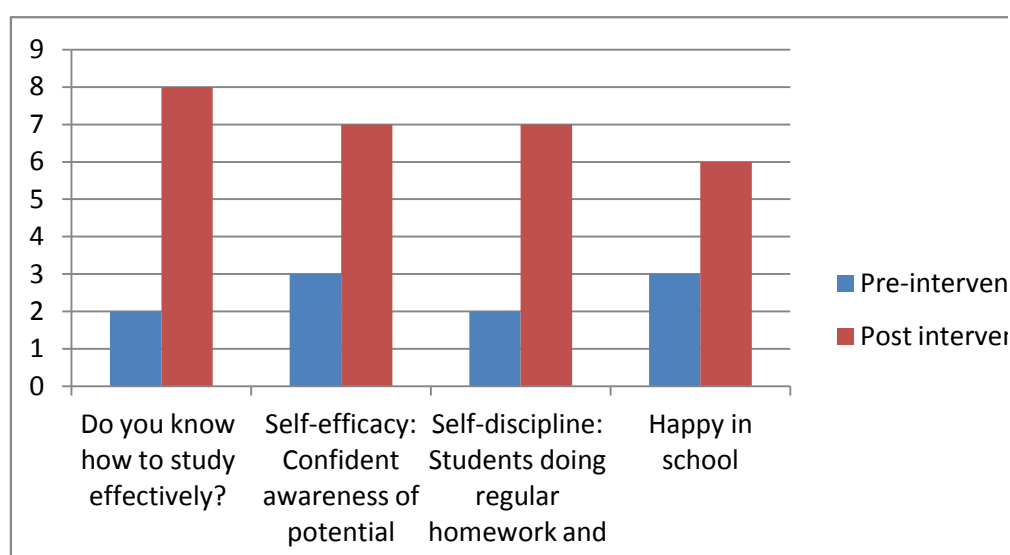
Figure 8: Impact of intervention

4.8 Mentoring

The positive psychology and the metacognitive strategies were delivered to pupils in the form of one to one mentoring. As part of the process, parents were given a feedback sheet which

they filled in prior to the final focus group meeting. Five of the eight parents returned the feedback sheet although some of those did not use the actual sheet they were initially given. The first question asked parents: What do you perceive to be the benefits (if any) of your child participating in the mentoring project? This question was also put on the student evaluation sheet.

All of the responses received indicated that they found the process to be useful but not always for the same reasons. Interestingly of the eight students participating seven students enthusiastically acknowledged in writing and in the focus group that the project was a success. One student did not return their evaluation sheet. Similarly five out of eight parents filled in and returned the evaluation questionnaires but seven of the eight parents attended the final meeting. In the five parent evaluations sheets and the seven student evaluation sheets certain themes emerged consistently. These emerging themes became evident when analysing the responses in the evaluation sheet.

4.8.1 A Caring Relationship

An interesting initial benefit as identified by the students was the notion of having someone in school that seemed to be on their side. Five of the seven students mentioned this in their response sheets. Four of the five parental response sheets also made reference to it. Parent one wrote:

> Having the opportunity to talk to a teacher about general things not related to a
> specific subject been taught by that teacher, made her realise that there was somebody
> she could approach about school related issues if she needed to (Appendix K p.3)

In a similar vein another parent said "she has definitely benefitted from the feeling that she has a coach and ally in school even though this can (rightly) challenge her and her behaviour"

(Appendix K P.4). S8 noted "I liked having a teacher who was interested in me and how I got on. It made me happier". This was teased out with both parents and students at the focus group meetings and a general consensus was reached that the students benefitted from this positive relationship. One of the students, S5 said in the focus group "I really thought that Ms. Connolly[2] cared about how I was getting on. Not just in school but in general. I saw a different side to her". In a similar fashion on the feedback sheet SE said "I got to know my mentor and it made me feel at ease knowing that there was someone in the school that I could always talk to". This supports the theory outlined in the literature review, Burke, 1991; Anderson and Shannon, 1998 and Rhodes and DuBois, 2008 about the need for a caring relationship between the mentor and the mentee and the positive effect such a caring relationship can have.

A finding, therefore, is that many students in large secondary schools often feel as though the school does not notice them. This has been highlighted in the section on self-efficacy. Schools need arrangements to recognise students who feel undervalued in the system. Students need to feel valued and that they have a positive, caring relationship with at least one member of the school staff. Of course, mentoring is not the only way of doing this and for the mentoring to continue in St. Mary's, there would need to be other benefits of mentoring identified by students.

4.8.2 Structure of Mentoring Sessions

Britner (2006) and Larose and Tarabulsy (2005) all emphasised the necessity of structure in mentoring relationships. The findings of this project support that research. All eight of the teachers involved felt that the mentoring handbook was useful in the mentoring session. T6

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[2] Teachers' names have been changed

said "It was good to have a written reminder of what I needed to do in each session" while T5 said "My pupil found the section on dealing with failure to be great". The teachers conveyed their satisfaction with the booklet in their written reports but it is also noted in the minutes of the mentoring meetings on several occasions.

The need to balance a structured approach with the unique needs of each of the pupils was something that the teachers also remarked upon on several occasions. T3 commented in her written reflection:

> While it was good to have a mentoring book to help us to work out what we could do it was also good that we did not have to stick to it session by session. I needed to spend longer on target setting and monitoring. One session was no-where near enough (Appendix I p.3).

Another teacher, T2, echoed this sentiment when he said "The mentoring book was great. I didn't use it every time though. Sometimes other priorities took over". The mentoring book was improved based upon the teachers' findings at the end of each reflective cycle. This will be discussed in the communities of practice section. In the focus group session the pupils were asked if they felt that each mentoring session had a clear focus. The responses were mixed. S1 said "It just seemed like a chat to me" while S8 said "At the start of each session she would tell me what I was going to do that day. I kind of thought that was a good thing" At their final focus group mentoring the parents raised the issue of wanting to be more informed about what was happening at the mentoring so that they could support it at home. The mentoring booklet could be e-mailed to parents in the future.

Overall there is definitely a need to provide the teachers with a structure. The handbook was deemed a good way of doing this. There is also a need to ensure that teachers also know that this is a suggested structure that can be tailored to the needs of their mentees.

One of the arguments put forward by Rhodes and Du Bois (2008) is that there is often much ineffective mentoring occurring which can mask the effectiveness of more successful mentoring relationships and cause the concept of mentoring to be devalued. They emphasise the need for mentors to be trained, committed and for mentoring sessions to be structured. Interestingly since the mentoring programme was introduced in St. Mary's and people became more familiar with the term, I have noticed teachers in other departments deciding that students need mentoring and pairing the students with other students or teachers to mentor them. In these instances neither the teachers nor student mentors have received any formal training. Generally these mentoring relationships do not tend to last very long because they are unstructured and the mentors have not given due consideration to what it is they are undertaking. Therefore I fully agree with Rhodes and Du Bois' assessment that the term is often used too loosely and I firmly believe that for positive benefits to occur the development of a caring relationship and a structured programme as outlined above are essential.

4.8.3 Confidentiality

One question on the feedback sheet asked the pupils: "Did your friends know you were involved in the project? If so, did you talk about it to them? Did you mind that they knew? All of the pupils wrote that their friends knew about the project. Seven of the eight said that they did not mind. SF, however, said "Yes, they did know although it was supposed to be private, they all found out about it anyway. …I would have rathered [sic] that they knew nothing about it". In a school community, it is difficult to manage a project like this with

discretion. The issue of confidentiality was something that was discussed with the parents in the initial focus group and something of great concern for them. The teachers could be relied on to deal with the issue discreetly but we were unsure as to how to advise the pupils with regards to their peers. The following was noted in the minutes:

> The other issue was what the students would say to their peers. A parent said that her child had been told about the project and was concerned she was going to be stuck with a pack of nerds. The parent told the child the degree to which her peers needed to know was up to the child and it was agreed that this was a good approach. Other parents said their child would not be bothered at all and should be free to discuss it with their peers and in fact that they had already. Again, it was decided that each child would find their own way suitable to them and that there was no need for a diktat for every child to be dealt with in the same way or to deal with it in the same way. However it was generally agreed that the school would deal with the topic as discreetly as possible." (Appendix K p. 2)

When the issue was teased out in the focus group with the pupils, the question was posed as to how you could get teenagers not to discuss the project with their peers and it was decided that this was virtually impossible. One of the anomalies around this then was that some students who were not invited to be part of the project felt disappointed. SF noted as her reason for not wanting her friends to know as "a lot of them were upset that they had not been chosen" while four out of eight pupils when asked "Can you think of any way the mentoring project could be improved?" said that more pupils should be involved. SD, for example, said "Expand, it's working well and I'd recommend it for any student" while SA said "I think that more people should be involved". Therefore, this again made me question as to whether we could justify this level of one to one support for a particular group of students because even

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though it was very useful to them, it follows that it would therefore be useful to all pupils and providing such labour intensive support to all pupils would be impossible in the current climate.

4.9 Practicalities of Mentoring

Many teachers involved in the project felt that the project was worthwhile. In both their written feedback and in their oral feedback each teacher acknowledged that they found the experience to be positive for both themselves and for the pupils involved. T2 wrote:

> I found the mentoring to be a great experience but I really struggled to find the time to meet the pupil this cycle. While I also thought that we should meet more, I struggled to find the time for the meetings that we actually had. (Appendix I p. 2)

This sentiment echoed the feelings of the other teachers involved all of whom commented on this in either written or verbal format. My main learning from this is that the mentoring, if it is to be sustainable in a school, needs to be well organised and supported by school management and the Department of Education and Skills. The teachers need to be given time to meet the pupils. This time should be timetabled in some form or other. The fact that the mentors met with their mentees on an ad hoc basis meant that not all pupils received the same level of support. It had initially been agreed to meet pupils at least once per half term but that teachers could meet more often if they felt that there was a need to. In reality some teachers did not meet their mentee every half term while others met with theirs on a fortnightly basis. There was a great disparity, therefore, with regards to the level of input received by each pupil. Some of the pupils commented that more regular meeting time would be beneficial. SF

commented that "the meetings should be increased to once a month as opposed to once a term if possible".

In the minutes of the final meeting with the teachers various solutions were offered to the issue of time. Teachers wondered if the management could cover one class per half term using the supervision allowance in order to free up the teacher to mentor a student. Other teachers wondered if they could use their own supervision and substitution time to mentor and then whether the school could acknowledge that time as delivered. The principal could not agree to these suggestions due to the already enormous substitution demands in the school. The teachers felt that this could potentially mean that the mentoring was unsustainable. Teachers did suggest however that they might be more committed to the process if one calendar week was identified as a mentoring week and each teacher had to make a concerted effort to deliver the mentoring at these times. This, they felt, might make teachers more regimented with regards to actually delivering the mentoring without T6 put it "getting swept up in the day to day work of teaching" (Appendix H p.7)

Overall, despite the fact that it was generally perceived as a positive process serious questions remain about the sustainability of such a project which relies on teacher goodwill particularly as we enter even more turbulent economic times.

4.9.1 Space and Privacy

A further practicality regarding the mentoring was an issue of space and privacy. St. Mary's is a large and busy school with generally a hundred per cent occupancy of its classrooms. The school has a General Purpose (GP) Area which is located near the office and the main school entrance. There are also a couple of glass offices near the main entrance. The mentoring was

supposed to be a private experience for the pupils and they were told they did not have to tell their friends about it. However given the practicalities, the mentoring occurred in the GP area or in the glass offices therefore it was inevitable that the mentees would be seen by their peers.

As stated above, most of the pupils were comfortable with the lack of confidentiality afforded by the project however there was one pupil who would have preferred if the other students did not know she was attending the mentoring. There is an oratory in the school where the pupil and their mentor could have spoken in private but the teachers felt that this was too private and they wanted to protect themselves by having the mentoring in a more public place. This was an issue for all of the teachers in both their written and verbal feedback. They were aware that the mentoring was not occurring in a private enough space while at the same time being cognisant of the fact that they could not be alone with the pupils. "I don't know where the best place would be really" one teacher echoed the concerns of all in the last mentoring meeting.

The overall finding with regards to the mentoring is a very effective means through which to deliver the positive psychology and metacognition strategies necessary to motivate these pupils to achieve. It is, however, perhaps not the most efficient means and requires significant good will on the part of the teachers therefore not making it a practical or easily transferable model of support in the current educational climate.

4.10 Management Theory

The findings in this section will focus on the Community of Practice and Distributed

Leadership Models. The data that will be analysed in this instance will be the feedback of the

teachers and the school management team. The data received from the teachers came in the

form of: a written report at the end of the process, reflections at the end of the meetings,

teachers' own reflective diaries. This served to ensure that triangulation occurred.

For the purpose of this project the Distributed Leadership and Community of Practice models

were linked.

4.11 Communities of Practice

As stated in the Literature Review, Wenger and Snyder (2000) define communities of

practice as "groups of people informally bound together by shared expertise and passion for a

joint enterprise" (p.139). The teachers who volunteered to participate in the project did so on

a voluntary basis and could have withdrawn at any point they wanted to commit to the

process because of their passion for supporting the needs of the more-able but underachieving

pupils. The group, therefore, could most definitely be viewed as a community of practice.

Overall the teachers enjoyed the community of practice model for organising the project. Of

the eight teachers involved six out eight provided feedback in the form of a written report at

the end of the project. T3 acknowledged that "The meetings were great. It was great to share

experiences with everyone and to hear how everyone else was getting on". T7 said "I loved

meeting up with everyone and getting time to talk about what was happening with the

students". If there was any criticism, it was that we did not meet often enough and that

meetings generally took place during teachers' lunch times. Six of the eight teachers

mentioned that they would like to meet more often and four out of eight complained about meeting at their lunchtimes. T1 said "I missed too many of the meeting because they were at lunchtime and I was away with The Transition Years". T6 noted in the minutes that she would not be able to attend the next meeting as she was involved in the school musical but hoped that at some stage in the future meetings could take place at a time other than lunch time. The school did on occasion provide substitute cover for the class before lunch time but this was not sustainable on a regular basis given the number of teachers who required cover and the cost of this for the school.

4.11.1 Boundary Practice

A boundary practice is a routine that sustains connections between communities of practice and provides an on-going forum for mutual engagement. The management of St. Mary's support this form of practice by creating circumstances which facilitated the meeting of the members of various learning communities within the school. In order to facilitate this project, the school provided the space for teachers to meet and offered a lunch for teachers who were willing to work through their lunch time. On occasion, they were also willing to organise substitute teachers to cover for teachers to allow them time to meet. This helped sustain the community and ensure on-going engagement with the process.

The six teachers who submitted written feedback commented on the meeting room and the fact that lunch was provided for them. T4 "The room was always set up for the meeting from the outset. The fact that lunch was provided also made it easier to handle the lunch time meetings" (Appendix I p.9). T5 said "It was great to meet in the same room all the time and to find lunch waiting for us. It made us all feel valued for what we were doing" The finding, therefore, is that boundary practices are very important in the establishment of a community

of practice. In this case, the boundary practices that ensured the success of the community of practice were: the consistency in terms of the meeting place and the provision of lunch to make the teachers know their efforts were valued.

4.11.2 Boundary Object

The term boundary object is attributed to Susan Leigh Star who used it to describe the function of tangible objects within and between communities of practice. In the case of this project, the boundary object was the mentoring handbook. Initially, I provided the group with a handbook which I informed them was to be the first draft and was subject to change based on their findings and their ideas. The minutes suggest that the group were happy to receive the handbook and I have noted the same in my learning journal. Aspects of the Mentoring Handbook provided a framework for the discussion at each meeting giving the meetings a structure without becoming overly structured. In the final term report T3:

> I liked how the mentoring booklet was not given to us as a fait accompli. It made me feel like my opinion mattered and it was nice to think of the finished book as a reflection of our collaborative efforts.

T4 said:

> The mentoring handbook was great for offering us guidance when we were mentoring. I liked how the reflection sheet was put in after each session even if I did not use it properly all the time. I thought it was good how our ideas were later taken on board and used to change the booklet (Appendix I p. 9).

Having the mentoring handbook as a boundary object, therefore, worked well as it gave the group a structure but without being overly formal. Also it gave the group a shared purpose.

Critics of the communities of practice theory e.g. Swan et al (2002, p 477-96) see little in the literature surrounding communities of practice to offer insight concerning the manageability of communities of practice. Furthermore, they argue that there is not enough empirical research regarding the role of leaders in communities of practice. This study looked at how distributed leadership principles could be used a means of leadership in conjunction with the community of practice model.

4.12 Distributed Leadership

Bennet, Wise and Wood do put forward three distinctive elements of the concept of distributed leadership that set distributed leadership apart from other forms of leadership. These three elements are similar to the framework distributed leadership as outlined by both Spillane and Sherer (2004) and Spillane and Diamond (2007).

4.12.1 Distributed Leadership and Communities of Practice

As outlined in the literature review section, the first of element put forward by Bennet, Wise and Wood, they adapt from Gronn's theory (2002) the idea that leadership is "an emergent property of a group or network of interacting individuals" (Bennet, Wise and Wood, 2002, p.6). Here the emphasis is placed on leadership not from an individual but from a group who work together to pool their initiative and expertise i.e. a community of practice. This is echoed by Spillane and Diamond (2007). As has been outlined above, it was generally felt that the community of practice model as successful for the organisation of the project. However, even though the community of practice was a collaborative venture in the main, there was a need for some leadership within it.

4.12.2 Leadership as Practice

The second aspect identified in Bennet, Wise and Wood's article suggests that in a Distributed Leadership model there is an openness of boundaries of leadership. This means the net of traditional leadership can be widened. According to Spillane and Sherer (2004) a distributed leadership perspective urges us to focus on others in the school who by virtue of formal position or informal role take on leadership responsibilities. Spillane and Sherer, however, see the importance of exploring the complexities of leadership practice in more depth. Drawing on distributed cognition and activity theory, they suggest a model where leadership is distributed or stretched over three key elements; leaders, followers and situations. Spillane and Sherer call this leadership as practice.

The first step was to move away from the traditional leader role of the one heroic leader leading everything in the school to stretching leadership tasks out to various willing individuals. In the case of this project I was such an individual and a rather junior member of the staff. The principal of St. Mary's, therefore, recognised the need for openness in the boundaries of leadership. For the situation to be successful, there was a need for the principal to be willing to distribute leadership roles and for staff members to be willing to take up the gauntlet. I recorded initial nerves and misgivings in my learning journal on September 3rd 2009. I stated "I am feeling a bit nervous about addressing the staff today. I have a feeling that a considerable number of them may not welcome input from such a junior member of the staff" (Appendix L p.1).

Fortunately because of the collaborative nature of the community of practice, I found the role of leader to be more that of facilitator or coordinator. I moved conversations forward when I felt we were getting bogged down on issues we would not resolve in that session, I collated

the findings of each meeting and adjusted the mentoring booklet accordingly. I organised

meeting times and ensured that the room was available and that the lunch was ordered.

Therefore in many senses being the leader was an organisational task. According to Spillane

and Sherer (2004) leadership perspective needs to be stretched over leaders, followers and the

situation. It was important therefore to record the experiences of everyone involved in the

community of practice and to ensure their point of view was acknowledged. This led to a

feeling of empowerment among participants. I greatly enjoyed the role and felt my skills as

an organiser and facilitator were enhanced. I also learned the value of meeting time to discuss

important issues. Given the high level of demands that are on them on a daily basis, teachers

cannot be relied on to read all written communication. I often found that notices placed in

pigeon holes in staff rooms were not addressed and therefore I was sure that all important

communications were given to the mentors orally with a written hand out as support.

In general the staff members were very happy with the organisation of the project. T5

commented "We were always informed well in advance when the next meeting would be.

This was great" while T6 remarked "I liked how we received gentle reminders about the

mentoring and our progress in our pigeon holes on occasion". T4 said "The organisation of

the whole project was excellent from start to finish and this ensured that the whole thing ran

smoothly" (Appendix I p.9).

4.12.3 The Many not the Few

Finally, the third aspect of distributed leadership is that "varieties of expertise are distributed

across the many not the few" (Bennet, Wise and Wood, 2002, p.7). This aspect argues that

initiatives may be set up by those with relevant skills in an area however others may then

adapt it and improve it within a mutually trusting and supportive culture. Spillane and Sherer

(2004) show how praise and affirmation can be used to create a climate of trust but that this needs to be combined with an acknowledgement of what to do better. The benefits of sharing practice are outlined. As teachers share ideas they accomplish several things: they give other teachers ideas, they show the weaker teachers that these tasks are possible to do and they make the big picture ideas concrete and clear.

Five out of eight teachers commented in their final reports that they enjoyed the opportunity to share practice. T4 said "This was the most meaningful learning I have done since becoming a teacher. It benefitted me not only as a mentor but also in my teaching" (Appendix I p.9) while T3 "I learnt so much from the others. It was fascinating to hear how different teachers approached situations differently" or as T6 succinctly put it "working as a group- brilliant" (Appendix I p.8).

4.13 Conclusions Regarding Distributed Leadership and Communities of Practice

To conclude, the Community of Practice model in keeping with a Distributed Leadership framework was a successful means of organising the project giving teachers the opportunity to contribute in a meaningful fashion and to ensure that they felt valued. Obviously there is a risk of bias in the feedback that the teachers gave as they were commenting about the project and its organisation to me and I am a colleague of theirs. At all times, I requested that the teachers answer questions honestly in order that the project could be improved in the future. Furthermore, I believe that a testament to the success of the management of the project is that seven out of eight of the original cohort of teachers agreed to participate again in the next school year. Also they spoke positively about the project and therefore five more teachers also volunteered to be involved in the second year.

4.14 Conclusion

This study unearthed some interesting findings regarding the various aspects it set out to explore. It identified that many teachers need to up skill regarding the needs of more-able students. It also indentified the main reasons why the pupils in this study were underachieving. It demonstrated that the positive psychology and metacognitive strategies had some success with the students but the degree to which they were successful is unclear. It threw up an unprecedented finding in the school relating to dual exceptionality. The findings highlighted that mentoring was a successful means of addressing the needs of the more able students but as will be discussed in the next session they raised some interesting questions about the sustainability of such a model in the current climate. The conclusions and recommendations drawn from these findings will be discussed and indentified in the next section.

CHAPTER 5

Conclusions and Recommendations

5.1 Introduction

This project is an action research project. As outlined in the Methodology section action research is recommended as a research strategy when "a new approach is to be grafted onto an existing system" (Cohen and Mannion, 1985, p.194) and the "fundamental aim …is to improve practice" (Elliot, 2000, p.49). Furlong & Oancea suggest action research can contribute to more theoretical knowledge production while at the same time achieving changed practice. For the purpose of this project, the model of action research developed by Jack Whitehead and modified by McNiff was used. The action plan is published by McNiff as follows:

- What issue am I interested in researching?

- Why do I want to research this issue?

- What kind of evidence can I gather to show why I am interested in this issue?

- What can I do? What will I do?

- What kind of evidence can I gather to show that I am having an influence?

- How can I explain that influence?

- How can I ensure that any judgements I might make are reasonably fair and accurate?

- How will I change my practice in the light of my evaluation? (McNiff, 2002, p.14)

The first series of questions were addressed throughout the methodology section but the final question is thus far unanswered and is dealt with in this section. Although the question is framed as using the first person, I intend to address it from a whole school perspective as well

as from my own personal perspective. Based on the findings of the study, I also explain in this chapter what I will not change in practice and what could potentially change if the supports existed in the education system. These form the basis for my conclusions and recommendations.

5.2. Gifted and Talented Pupils: Teacher Knowledge and Information

Teachers are not well enough informed about the characteristics of and the needs of more-able pupils. The surprise they expressed when reading about the various profiles as devised by Betts and Neihart suggests that they had not considered gifted and talented students in such a light before. Many said that they had misconceptions as to what gifted and talented students would be like and how they might behave. Seven out of eight of the teachers commented that they thought that the profiles were a useful tool not only for the mentoring but also to help them gain a better understanding of these pupils to enhance their own classroom practice.

5.2.1 Recommendation

Teachers need to be better informed about the learning needs of more-able pupils. Betts and Neiharts (1988) profiles and the NCCA guidelines should be shared with teachers in order to give them a better insight into the needs of gifted and talented pupils. These should be shared with all staff members in some format. Furthermore, teachers should be encouraged to watch out for dual exceptional students in their own classrooms. They will only be able to do this if they are sufficiently well informed about the potential characteristics that dual exceptional children might exhibit.

In St. Mary's, I gave a presentation on the characteristics of gifted and talented students to the whole staff. This should be revisited regularly and teachers should have the opportunities to learn more about the needs of these pupils as part of their Continuing Professional Development portfolio. Schools could create communities or practices in the school to share their learning and devise strategies that might best address the needs of these pupils in their school.

5.3 Reasons Gifted and Talented Pupils Underachieve

An interesting conclusion drawn from this study is that gifted and talented pupils underachieve for many of the same reasons as other adolescents of lesser academic ability. One of the primary reasons they underachieve is that they lack motivation. This lack of motivation can be caused by or contribute to poor organisation, lack of self-discipline and lack of self-efficacy. These findings surprised many of the teachers in the mentoring group who had come to see the pupils as being in a separate category to the other pupils once the label 'gifted' has been given to them. Teachers seemed to have a misconception that being gifted and being motivated were automatically linked. This is again why Betts and Neihart's profiles are useful.

Another conclusion that can be drawn from the study is that many of the skills listed above can explicitly be taught. Pupils can be taught how to organise themselves and how to believe in their own ability. Teaching pupils these skills is very valuable. Learning these skills in SPHE is not sufficient if the students are not able to make links between the usefulness of what they do in SPHE when applied to other subject areas.

5.3.1 Recommendation

A recommendation emerging from this is that many gifted and talented pupils need instruction on how to organise themselves and study effectively. The SESS document "Metacognition for the classroom and beyond: Differentiation and support for Learners" is a brilliant resource with strategies to help student to study effectively. All SPHE teachers and Guidance Counsellors should be encouraged to become familiar with the document.

A further recommendation is that schools need to ensure that all pupils who are highly-able also believe in their ability and are not afraid to challenge themselves. Students should not be afraid of failing as long as they try. Schools should have a culture where effort is valued more highly than achievement. Teachers need to consider how they use praise; the emphasis should be on the work put in to a product as opposed to the end product itself i.e. the effort made to meet a target as opposed to personal/ more general praise. Gifted and talented students need to be taught how to discipline themselves and they should be encouraged to develop self-efficacy and self-belief. Just because they possess ability, it does not automatically follow that they know they have it. Whether these areas are addressed through individual interventions such as a mentoring project or in a manner that reaches other students as well is up to schools to decide.

St. Mary's has decided to continue addressing the needs of these students specifically through mentoring. Whether it is sustainable long term given the current demands on teachers has not yet been determined. In my own teaching I will give more careful consideration to my use of praise and will explicitly teach thinking skills.

5.4 Conclusions and Recommendations Regarding Positive Psychology

Sharing the concept of stretch zones with pupils is a good idea because many more able pupils feel that their ability is undermined when they are challenged in school. The teachers shared the concept of the stretch zones with the pupils during the mentoring sessions and anecdotally the mentors claimed that the students responded well. According to the mentors, the pupils also responded well to learning about gifted men and women who had not achieved in conventional settings. The idea of this was to build resilience and to ensure that pupils felt comfortable with challenge. The exact impact that these interventions had with pupils were undetermined during this study but the overall judgement was that they were worthwhile. The challenge for teachers is to get pupils to engage thoughtfully with these concepts. That was a difficulty encountered during this study; it was difficult to ascertain the level to which the students were taking the ideas on board and it was felt by the mentors that talking them through them was not enough to ensure active engagement. A potential area for further development could be that the community of practice could identify ways of introducing these concepts in a more active and less didactic manner.

Positive psychology strategies were also used to develop the students' self-efficacy. The teachers were surprised the degree to which this was necessary with pupils of such high ability. This reinforces the earlier discussion about the need for schools to ensure that teachers are properly informed about the needs of more able pupils as many teachers have misconceptions with regards to this area. Being selected for the mentoring project was in itself a means of developing the students' self-efficacy. It demonstrated that the school believed in them. Positive psychology encourages positive reinforcement of students.

5.4.1 Recommendations

Schools should consider the idea of resilience with their pupils. They need to do this in a meaningful way so that students engage with the concept. An interesting area for the school to consider exploring might involve looking at activities that enhance students' resilience. A further recommendation is that schools should use positive psychology to develop self-efficacy in its pupils. This could be done through mentoring but could also be built in to the role of the form tutor, to SPHE classes and the pastoral care team of the school.

5.5 Conclusions and Recommendations Regarding Mentoring as an Intervention

As was discussed above, mentoring is an effective means of demonstrating to pupils who lack self-efficacy that there is a person in the school who believes in and cares about them. This is beneficial for the pupils as it helps them to develop confidence and on the whole it makes them feel happier in the school. The fact that a small sample of students all identified this as a need and a benefit from the mentoring makes me wonder how many of their peers, not just gifted pupils, feel like this.

If a mentoring programme is being run in a school, there is a need for a structured approach around it. If the mentoring is to be meaningful, teachers need guidance as to the structure that each session could take and what areas should be covered in each section. While a structure is crucial, it is also important to acknowledge that those delivering the mentoring are professionals and that each pupil receiving the mentoring is unique so the teacher can use their judgement to omit certain sections or to focus on certain areas for longer.

There are issues to consider around the justification of one to one intervention for a select group of pupils especially when the benefits of the mentoring could also benefit their peers. Because schools can't guarantee complete confidentiality to the pupils involved, there will invariably be a group of pupils who will feel over looked even though they could benefit from the mentoring. This thesis has explored the varying social and emotional needs of more able pupils; these needs surprised many of the teachers involved in the project. Schools, therefore, need to support these students and undoubtedly mentoring is a constructive way of doing this. It could be argued that mentoring in small groups would be more justifiable however all the teachers felt that in that case the quality of the mentoring experience would be compromised.

5.5.1 Recommendations

All pupils in secondary schools should feel as though there is one person in school they can talk to and that cares about them. This should not only be the case for highly able pupils but should be the case for all pupils and cannot be left to chance. There should be formal structures around this whether this is through the development of the role of the form tutor/class teacher or through other pastoral avenues.

If schools are providing a mentoring programme they should provide teachers with a structure for the programme. A mentoring hand book is an effective way of doing this. However the teachers should also be allowed to tailor the mentoring to the needs of the individual pupils as well. Schools should support the mentoring process by time tabling the mentoring so that teachers are not trying to fit the mentoring in on top of their other work as this can dilute the experience for the students as the mentoring is not a priority and could be superseded by other commitments.

5.6 Conclusions and Recommendations Regarding Communities of Practice

All of the teachers involved found that being involved in a community of practice was a worthwhile experience. Despite the fact that the teachers were meeting in their free time, they continued to attend the meeting right up until the end and many seemed genuinely disappointed when meetings were scheduled for times that they were involved in alternative activities. Throughout the process teachers learned about the educational needs of the more-able pupils they teach, they learnt about the theory surrounding mentoring and adolescents as well as engaging with some of the main tenets of positive psychology. They were therefore exposed to a variety of professional development opportunities.

The teachers benefited from having the opportunities to problem solve collectively and to share ideas. The dynamic of the group also allowed for an air of collegiality. The mentoring booklet proved to be a useful document as a focus for the meetings. The use of a reflective cycle also lent itself well to the community of practice model because an action plan could be created based on the collective findings of the group.

The only issue regarding the transferability of such a model would be that in this instance the group were all volunteers. It was not a form of professional development imposed upon them by the school or the state. I wonder how well the group would have worked together if people had not chosen to attend and were there out of obligation as opposed to on a voluntary basis.

5.6.1 Recommendation

Communities of practice can be a very powerful means of professional development for teachers. Combined with action research they can see meaningful change occurring in

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schools. An interesting area for further exploration might be to examine communities of practice as a model of continuous professional development where the participants have not self-selected.

5.7 Conclusions and Recommendations Regarding Distributed Leadership

In a school the size of St. Mary's distributed leadership is a sensible model of leadership. For the school to move forward and engage in all of the latest pedagogical advancements or Department of Education and Science strategies and initiatives, it is imperative that the principal distribute leadership to willing staff members. This model provides professional development for the teacher leader involved giving them the opportunity to develop leadership skills. Furthermore, in a system that currently is still dictated to by seniority, it provides some staff members with opportunities for career progression that might not ordinarily be available to them.

The other side to this is however, that distributed leadership relies on the existence of willing leaders in the school. In the current climate, good will in schools has been seriously eroded and such leaders may not exist or where they do exist they may be silenced by the disgruntled majority. Following an agreement that was reached between parties to the Teachers Conciliation Council, it is envisaged that by 2014 seniority will no longer have the same weighting in schools and when that happens a distributed leadership model may become more commonplace in Ireland.

5.7.1 Recommendations

School principals need to distribute leadership among willing leaders in the staff. This is good for staff morale and provides professional development opportunities for interested teachers. However, the management of the school should also support these leaders by attending some of their meetings. Distributed Leadership, communities of practice and action research models all complement each other and are a useful means of teachers working together to make meaningful changes in their schools.

5.8 Overall Conclusions

Mentoring is an effective means of providing for the needs of more-able but under achieving students. However, the mentors need to be well trained and the mentoring sessions should be well structured. Mentoring is not, however, the only means of addressing the needs of these pupils and there are probably some more efficient ways of doing this that do not rely on one to one input on the part of teachers. It would be interesting to see if the mentoring was as successful and effective if it was not delivered as a one to one input rather in small groups. Another conclusion is related to the education of gifted and talented pupils. Teachers would benefit from a better understanding of the needs of more able students and schools should work on banishing myths surrounding these students and providing training for teachers on the educational needs and difficulties of these students. Schools might also benefit from introducing some of the key concepts of positive psychology and metacognition to their students.

Most of the students involved in this project all went on to sit very successful Junior Certificate with one of the students achieving 10 A grades, one achieving 9 and another

achieving 8. The remainder obtained above average Junior Certificate results with some very above average (4, 5 and 7 As). I decided not to use this information in the findings as there was no mechanism for gauging how they would have got on if they had proceeded as they were doing in school. Their Junior Cert results were in the main a significant jump from their second year summer test results and anecdotally students have suggested that the mentoring played a significant role in that. Many of their teachers also informally commented that behaviour in class or organisation skills had improved when chatting to their mentors in the staffroom. Some mentors notes this in their own reflections as an aspect of the mentoring that they found satisfactory but again I have not collected that data in a rigorous or consistent fashion. In order for schools to expend valuable resources on a project such as this, the project would have to be spread over a few years to gauge improvement from year to year and a mechanism for gauging student potential based on standardised tests would be useful.

One issue, therefore, that has arisen from this study is that one to one mentoring may be too labour intensive in the current economic climate and yet many of the techniques used in the mentoring sessions were considered useful by the students and their parents. Other opportunities need to be considered for the implementation of some of the positive psychology and metacognition strategies that were used in the course of this study. Aspects of both of these complement the SPHE curriculum and there is a missed opportunity in SPHE lessons to equip the students with key components of metacognitive awareness and in positive psychology. This would need significant up-skilling on the part of the teachers and also it would require a move in the context of the school about which I am writing to more specialised SPHE teachers which again given the complications of timetabling for such a large school is also unlikely. The other difficulties with this are outlined in section 4.6.

By and the large, my most significant learning from this project was the power of communities of practice as a valuable form of continuing professional development. The teachers involved all acknowledged huge learning through their participation in the community. The distributed leadership model, whereby the community was led by an 'ordinary teacher', worked well to ensure that there was a feeling of collegiality while still maintaining a focus.

Action research also complemented this in that it helped to identify a need and provided a structure in the form of reflective cycles. One aspect of action research is that it is practitioner based research and this proved to have both its advantages and disadvantages. As both a teacher and researcher in the school, I needed to constantly be aware of the possibility of bias creeping into the study as I very much wanted the work to be worthwhile. However, being a teacher in the school, I know how busy the teachers' lives are and therefore would only endorse a project that I felt used their time effectively and therefore, in many ways I was very aware of the need for evidence if the project was going to continue and occupy space in the school. In terms of collating the data being both a researcher and a teacher in the school also had advantages and disadvantages. The advantages were the ease of access to the students and to the teachers. This meant I could 'chase' people who had not handed me reports by the dates they should have done. It also meant I knew the best times to schedule meetings and was careful not to choose weeks when teachers were already over burdened for example when they might have had a parent-teacher meeting after school already in the week. Someone conducting research from the outside would not have been so in tune with the nuances of school life. Also the teachers were possibly more committed to the project because they knew me and so there was a sense of loyalty involved in terms of filling in reports and attending meetings. Obviously this could have proven to be a disadvantage as

well because they may not have given fully honest feedback regarding the project for fear of causing offence to a colleague. In order to counter act this, I conducted the meetings in a professional and businesslike manner making sure that I always emphasised the need for honesty and that comments would be used to improve the mentoring and I was, therefore, always open to constructive advice. Furthermore, I would open the meetings sometimes talking about what worked for me as a mentor and what I was struggling with as I felt that this would set a precedent in terms of other mentors feeling comfortable to criticise the process if they felt the need to do so.

5.9 How Will I Change my Practice in the Light of my Evaluation? (McNiff, 2002, p.14)

As this is an action research project, I feel it is fitting that I conclude by answering the question above. As has already been explained at the start of this chapter, the 'I' in this question refers both to me and to St. Mary's as a whole. As a result of this study, St. Mary's has adapted a community of practice model of continuous professional development for more of the staff. Communities have been set up to explore how the school could use 'Assessment for Learning' and 'Cooperative Learning' techniques as it is seen as an effective means of exploring new ideas in a meaningful way in a large and busy secondary school.

Mentoring of underachieving more-able pupils has become established practice and is part of the school policy for providing for more-able pupils. The mentoring continues to be one to one mentoring but may have to be expanded to include group sessions. Names of exceptionally able students are shared with all teachers at the start of the year and in-service training has been given to teachers on the needs of these pupils and on differentiating their lessons to ensure that more-able students are challenged in their lessons.

As a teacher, I reflect more on my practice and continue to keep a reflective diary. I also have been more aware of the social and emotional needs of the students in my classes, even those who outwardly appear very confident. I have become more judicious in my use of praise; valuing effort over achievement. I have also been more cognisant of the fact that there might be students who are dual exceptional in my classes and have referred any potential cases to the learning support department. Overall having acted as a mentor, I got great insight to the school experience from a student's perspective and this has made me a more mindful teacher.

5.10 Summary of Findings

Gifted and Talented Students:

- Teachers need a better understanding of this area. Betts and Neiharts profiles are useful in helping teachers gain a better understanding.

- Teachers need more awareness of the possibility of twice exceptional students.

- The reasons for underachievement among the gifted and talented students in this study were: A lack of motivation, poor organisation, a lack of study skills/ not understanding how best to study, lack of self –efficacy, lack of self- discipline.

- Metacognition and the strategies outlined in the SESS booklet can be used to address some of the issues outlined.

- Positive psychology can be used to address some of the issues around self-efficacy.

Mentoring

- Caring relationship between mentor and mentee has positive benefits for students particularly in a large school.

- The mentoring proved to be a positive experience for both the students involved and their mentors.

- Structure is important in mentoring sessions and in order for the mentors to be able to structure the sessions effectively training is needed.

- A mentoring handbook is also useful to help the teachers to put structure on their mentoring sessions.

- The mentoring was such a positive experience for many students that other students who were not receiving mentoring began to feel disadvantaged as a result. This begged the question as to whether the one to one input was justifiable.

- If schools are going to implement a mentoring programme for more-able students, they will need to consider issues around time tabling, practicalities regarding rooms, space and privacy.

- Mentoring might not be the only way of addressing the needs of the students. Form tutors or SPHE teachers could play important roles in addressing these needs.

Successful Strategies

- Metacognition: SQ4R/ Mind and Concept mapping/ Study planning and time tabling.

- Positive Psychology: Stretch zones, growth mindset, addressing fear of failure, visualisation.

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APPENDICES

Parent Information Sheet

Dublin City University

Parent/Carer Information Sheet

Masters Thesis: "*: Leading a school based project that uses mentoring as a means of helping under-achieving but highly able students to bridge the gap between their current attainment and their potential ability.*

Dear Parents/ Guardians,

I am pursuing a research masters through Dublin City University under the supervision of Dr. Joe O' Hara.
I wish to conduct my research on the topic outlined above.
We have identified your child as possessing strong academic ability. We feel however, that he/she is underachieving. We have, therefore, chosen your child to participate, you your permission, in a mentoring programme.

What the study is about?
The study looks at possible reasons why children of high ability underachieve in schools. It hopes to use this information to devise a mentoring programme aimed at promoting a more positive outlook towards study and education in general. It also aims to help students to understand the importance of study and to become more proficient in terms of organising their study.

What will you have to do?
Your consent is needed if your child is to particpate in the project. You will need to fill in a consent form and ask your child to return this to the school.

If your child chooses to participate in the project, they will be paired with a mentor, who will be a member of the teaching staff of the school. The will meet with their mentor twice a half term during the school day.

Your child will also be invited to fill out a questionnaire to explore the reasons why he/ she is not achieving as they should be. He/ She may also be interviewed on a one to one basis by me in order to expand upon issues underlined in the survey.

What are the benefits?

It is hoped that the mentoring will impact positively on your child's attainment in school and on their general attitude to school and learning.
The project will help to inform the future organisation of such projects within the school.

What if I do not want my child to participate?
Participation in the study is completely voluntary and is entirely up to the child providing there is parental consent.

What happens to information gathered?
Information gathered will be treated with the utmost confidence and anonymity. Once analysis of the information gathered has been completed, all data will be destroyed. The results from this research will be reported in my thesis.

Who else is taking part?
A selection of students have been chosen in accordance with their attainment and ability. . These students, with the consent of their parents, will also be taking part.

What happens if I have any more questions?
If you have any more questions, you may contact me at the school. Contact details: Ms. Burke
You may also contact my superviser: Dr. Joe O' Hara at the School of Education Studies in DCU. Phone: 01 7007417

What happens if I change my mind during the study?
If at any point your child wishes to withdraw from the research they may do so.

The University is subject to the Freedom of Information Act and that research procedures will adhere to the provisions of Data Protection legislation

The research participant can withdraw their consent at any time, including after the data has been collected.

What if I have concerns?
If you have any concerns about this study and wish to contact someone independent, you may contact *The Chairman of the DCU Research and Ethics Committee,*
> *Dublin City University,*
> *Dublin 9*
> **Tel.:** +353-1-7005566

Dublin City University

Parent/Carer Consent Form

Masters Thesis: ": Leading a school based project that uses mentoring as a means of helping under-achieving but highly able students to bridge the gap between their current attainment and their potential ability"

I have read and understood the information leaflet in detail and understand the particulars of the research project. I understand that the identity of my child will not be revealed at any stage in reporting this research and all information will be treated in the strictest of confidence. I know that the students' participation is voluntary and that they can withdraw from the project at any stage without giving reason.

I hereby give consent for my child to participate in the research for the above study.

Signed: _____
Date: _____

Student Information Sheet and consent form

Dublin City University

Pupil Information Sheet

Masters Thesis " Leading a school based project that uses mentoring as a means of helping under-achieving but highly able students to bridge the gap between their current attainment and their potential ability"

Dear Pupil,

I am doing a research Masters through Dublin City University. I am researching whether mentoring can help students who are not doing as well as they should at school to improve their results and their attitude to school in general.

As a student who has the ability to do very well at school, you have been chosen to participate in this project. Please read the information sheet below and decide whether you want to participate.

What the study is about?
The aim of the study is to firstly find out why some students are not doing as well as they could do in school. Then, we aim to pair that student with a teacher to see if through mentoring, the students' grades improve and if they feel more positive about school and learning.

What will you have to do?

First of all you must consent to being part of the project.

If you agree to take part in the project, you will be paired with a teacher. The teacher will meet with you twice a half term for forty minutes during the school day. They will discuss your attitudes to school with you and they will try to help you to organise your study better.

What are the benefits?
It is hoped that this will help you to improve your grades and do a better Junior Cert and Leaving Cert.
It is also hoped that, through mentoring, you will start to like school a bit more.
It is also hoped that we can use what we find out this year to develop a mentoring programme for students in future years.

What if I do not want to participate?
Participation in the study is completely voluntary and is entirely up to you. Your parents will have to give their consent but if you or them do not want you to particpate then that is absolutely fine as well.

What happens to information gathered?
Information gathered will be treated with the utmost confidence and anonymity. Once analysis of the information gathered has been completed, all information will be destroyed. The results from this research will be reported in my thesis.

Who else is taking part?
A selection of students have also been chosen to take part. These students, with the consent of their parents, will also be taking part.

What happens if I have any more questions?
If you have any more questions, you may find me in the school to discuss anything you might like to ask.
You may also contact my supervisor: Dr. Joe O' Hara at the School of Education Studies in DCU. Phone: 01 7007417
.
What happens if I change my mind during the study?
If at any point you wish to withdraw from the research then you are free to do so.

What if I have concerns?
If you have any concerns about this study and wish to contact someone independent, you may contact: The Chairman of the DCU Research and Ethics Committee,
                 Dublin City University,
                 Dublin 9
                 Tel.: +353-1-7005566

Dublin City University

Masters Thesis: "*: Leading a school based project that uses mentoring as a means of helping under-achieving but highly able students to bridge the gap between their current attainment and their potential ability.*

I have read and understood the information leaflet in detail and understand the particulars of the research project. I understand that my identity will not be revealed at any stage in reporting this research and all information will be treated in the strictest of confidence. I know that my participation is voluntary and that I can withdraw from the project at any stage without giving reason.

I hereby give consent for my participation in the research for the above study.

Signed: _____

Ethics Form

Research Ethics Committee: Notification Form for Low-Risk Projects and Undergraduate Dissertations

DCU Research Ethics Committee has introduced a procedure for notification to the committee of
1. low-risk social research projects, in which personal information that is deemed not sensitive is being collected by interview, questionnaire, or other means
2. dissertations on undergraduate programmes in all disciplines.

The committee requires researchers to concisely answer the following questions within this form (before the project starts):

Project Title:
Leading a school based project that uses mentoring as a means of trying to help under-achieving but highly-able students to bridge the gap between their current attainment and their potential ability.

Applicant Name and E-mail: Pauline Burke   paulineburke08@gmail.com

If a student applicant, please provide the following:
Level of Study (Undergrad/Taught MSc/Research MSc/Phd): Research Masters
Supervisor Name and E-mail: Dr. Joe O' Hara Joe.ohara@dcu.ie

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1. Provide a lay description of the proposed research (approx. 300wds):

> The project is a research Masters through the education department. It is an action research project. The aims of the project are:
>> To devise a mentoring programme for a selection of students in our school
>> To pilot the programme in the school in which I currently work
>> To evaluate the success of the programme from both teacher and   students' perspectives

> A team of 6 teachers are involved in the project. Each teacher will be assigned a student who the school has identified as underachieving and the teacher will mentor this student. The mentoring sessions will take place at least once a half term but more often if the teacher feels it necessary.

> The teachers will be given an outline of issues that they will focus on in the mentoring. They will use the mentoring to discuss student attitudes to school and learning. They will also try to guide students in their study by raising student awareness of how they learn and how to structure their learning better. They will use materials developed by the Secondary Education

Support Service on "Metacognitive Skills".

The students will be interviewed at the start of the process. They will also fill in a metacognitive inventory which will get them to think about how they learn and organise their learning.

The parents of the students will be fully informed and will be invited to participate in the process. The students will be fully informed of the project and their consent to participate will be essential. Student identities will all be kept anonymous.

2. Detail your proposed methodology (1 page max.):

The method of research will be action research. The goal of Action Research is such that "the ensuing feedback may be translated into modifications, adjustments, directional changes, redefinitions, as necessary, so as to bring about lasting benefit to the ongoing process itself rather than to some future occasion" (Cohen and Manlon, 1994, 192). Taking this on board, this project looks at existing practice in terms of provision for more-able students in the school and will look at developing an in-school policy to help up deal better with their needs. Information we receive from the students will help us to reflect upon and develop our own practice. The research will be conducted in stages and will be reviewed and improved upon at the end of each cycle. Through using a 'self-reflective process' (McNiff et al, 2003, 29), I hope that I and the other teachers involved in the project will be able to improve on current practice.

Students will be asked to answer questions in a semi-structured interview at the start of the process. They will also complete the metacognitive inventory during their first mentoring session. The students will then have to participate in at least one mentoring session a half term. Study techniques that are suggested to the students should then be tried by the students so that they can find a model that works best for them, They will be expected to give feedback at the start of each mentoring session as to how they found the particular strategy the were using.

The mentoring will take place during the school day. The teacher will give up a class of their own free time and will try their best to match this up with a non-academic subject on the student's timetable. If this is not possible, the teacher may have to take the student out of an academic lesson. The teacher will negotiate this with the student and the class teacher.

Both the students and the teachers will be expected to write down their reflections at the end of each session. Teachers involved in the project will also be expected to meet on a regular basis in order to discuss the outcome of each mentoring session and to discuss the outline for the next session. The school will support some of those meetings while the teachers will be expected to give up their own time as well on occasion. The teachers will be fully aware of this from the outset.

2

3. Detail the means by which potential participants will be recruited:

The students will be identified using the testing that the school conducts when they enter the school. The students completed the Cognitive Abilities Test (CAT3) and the Drumcondra Reasoning Test (DRT). On the basis of the results of this a list students with special educational needs at both ends of the spectrum was identified. The students are then monitored as they progress through the school to ensure they are meeting their potential.

Teachers have expressed concern that a core group of students are not realizing their potential. The school will examine the summer test results of the students and identify a group that is at risk of not succeeding at the level that the testing indicates they should. Teachers' comments on the reports will be taken into account. The teachers will then discuss the students and identify what they feel is the problem with the student be it organization, a lack of motivation and whether as a group based on their results, the teachers' comments and their own professional judgment the student would benefit from being mentored. A group of six students will be identified in this manner.

The first stage taken to recruit the participants will be to contact the parents in order to invite the parents to an information evening about the project. All the parents' phone numbers are available to teachers on the school intranet site.

At the information evening, I intend to give a short presentation about the project, my intention to do an Education Masters as well as an outline of what the mentoring will consist of. The parents will also be given an information sheet and a consent form at this stage.

If the parents agree to allow their children to participate in the project, I then intend to speak to each student individually and explain the project to them. I will then give the student an information sheet written in child friendly language. I will explain to them that participation is entirely voluntary. If they want to participate, I will give them a consent form to take away. If they want to participate in the project, they will be asked to return the consent form to me in the school. Students are under no obligation to participate and the fact that it is voluntary participation will be emphasized to all students.

The teachers involved in the project will be a part of a team of teachers who elected to participate in a "gifted and talented" project in the school three years ago. These teachers have already undertaken a course in gifted education and so will have grounding in the theory surrounding gifted education. The teachers' participation is entirely voluntary. As far as is possible, we intend to match a teacher with a student who he or she does not teach so that the mentoring relationship is different to the teacher- pupil relationship.

4. How will the anonymity of the participants be respected?
    I will not disclose the identity of the students participating to any of the other

students in the school. However, the students will be coming out of mainstream classes so it is unlikely that they will remain anonymous. The students and parents will have to make a decision about whether they want their child involved based on this information. If students wish to tell students, they are involved in the project then they are free to do so.

Any data received will be stored on my computer on an account accessible to me only on my personal computer. Any paper files will be kept in the study of my private residence and not in common areas at school.

In my thesis, the names of all the students will be changed. The information will be destroyed at the end of the project upon completion of the thesis.

5. What risks are researchers or participants being exposed to, if any?

As the participants in this research task are human beings, there are going to be risks for those involved at an emotional level. As adolescents, students may not like being singled out to participate in something that their peers are not a part of. This could cause the student to feel some form of emotional distress. I intend to counter-act this as far as is possible, by first of all involving the parents who will have a better knowledge of the young people than I have. If a parent feels that his or her child would have a problem with being singled out and they feel that it would be better if the child did not participate then obviously then they do not have to put their child forward.

Furthermore, meeting with the parents will be a good opportunity to learn more about the children's emotional needs and to tease out how best to explain the project to the child in the most sensitive manner. The project will be run on a discreet level to save the children from feeling self conscious in front to their peers. At the same time however, the students are free to discuss the projects with friends if they want to. The students will not be told the names of the other students participating.

Another risk for the children is that they are participating in a project in which they will be expected to communicate with adults. Some students will feel nervous about this. It is the job of the mentor to make the students feel comfortable in their presence. I will also try to be as sensitive as possible when explaining the project to the students and when conducting the interview. The fact that students will be matched with teachers who do not teach them should also help to put the students more at ease.

Some of the teachers could potentially be caused stress by giving up a class of their own free time and also by attending meetings. As professional adults, they have chosen to participate in the project and are very much aware that they can leave the project at any time if they wish to do so. They must, however, be mindful of the needs of the child they are mentoring if the choose to discontinue the relationship.

6. Have approval/s have been sought or secured from other sources? Yes/No
If Yes, give details: The school in which I work has already given approval for the research to take place within the school.

7. Please confirm that the following forms are attached to this document:
Informed Consent Form   Yes
Plain Language Statement   Yes

If not, explain why:

NB – The application should consist of <u>one file only</u>, which incorporates all supplementary documentation. The completed application must be proofread and spellchecked before submission to the REC. All sections of the form should be completed. Applications which do not adhere to these requirements will not be accepted for review and will be returned directly to the applicant.

The administrator to the Research Ethics Committee will assess, on receiving such notification, whether the information provided is adequate and whether any further action is necessary. Please complete this form and e-mail to fiona.brennan@dcu.ie

<u>Please note:</u> Project supervisors of dissertations on undergraduate programmes have the primary responsibility to ensure that students do not take on research that could expose them and the participants to significant risk, such as might arise, for example, in interviewing members of vulnerable groups such as young children.

In general, please refer to the Common Questions on Research Ethics Submissions for further guidance on what research procedures or circumstances might make ethical approval necessary   (http://www.dcu.ie/internal/research/questions_ethics_submissions.pdf)

Letter to School Board of Management

Teacher's Address
27th February 2009

To:
Mr Carmody,
Chairman of Board of Management,
St. Mary's Secondary School,
 Rural Town,

Dear Mr. Smith,

I am hoping to complete a Masters in Education in Dublin City University. The entire Masters will be done through a research thesis. The thesis will be based on the findings of a research project which I am hoping to conduct in St. Mary's during the academic year 2009-2010. The project will be a mentoring project aimed at more-able but under achieving students in the hope that we can begin to build a bridge between potential and achievement.

Eight students will be mentored by eight teachers. The teachers will require a space in which to meet and the parents would need to be informed of the project.

In-keeping with ethical procedure I request formal written permission from the B.O.M. in order that I may undertake said research.

Yours sincerely,

Pauline Burke

APPENDIX F
Copy of DRT Test

APPENDIX G
Copy of CAT 3 Test

Minutes and Transcripts of Mentoring Meetings

Minutes of mentoring meeting- Wednesday 13th May 2009

In attendance: P B, NS. EC, C Mc, AF, JL, SC

Minutes taken by SC

Apologies from mentors unable to attend due to lunch time meetings.

Began with short presentation on background of the project. Role of SESS etc and how mentoring may be structured. Slides of presentation attached. Main focus is on the "hidden" gifted.

Discussion on mentoring structure.

EC suggested target setting would be a good starting point. Everyone agreed.

The targets could be distributed under the following headings: **behaviour, organisation, academic, social.**

PB – then outlined the role of motivation, attitudes to learning and metacognitive skills. CMC suggested that these would have a domino effect on other aspects of the students' school lives. It was agreed that the mentoring would take place a minimum of once per half term but could be more if the teacher deemed it appropriate.

CMC highlighted the importance of finding a quiet space in which to mentor. The chaplain's office, glass meeting rooms were suggested. PB highlighted the level of commitment that would be involved. Approx one class every 3 weeks. It was agreed that any paperwork should be filled in at the end of the mentoring session so as not to add extra work load.

The question as to how we will measure success was discussed. It was decided to look at academic results, absenteeism, attitudes to school. CMC outlined the need for meeting time for the team next year as there would be a great need to discuss ideas and how they worked and the progress of the students.

The team then went through the list of students, looking at their results at Christmas as well as their CAT scores and each teacher agreed on who they were going to mentor next year. It was also decided that the parents would have to be informed of the mentoring.

Minutes of Mentoring Meeting September 3rd 2009

In attendance: P B, T1, T2, T3, T4, T5

Minutes taken by CC

PB welcomed everyone and thanked them for volunteering to be involved in the project and added that she looked forward to everyone working together for a positive outcome for the pupils.

Apologies were shared from those unable to attend today due to other commitments.

PB shared the goals of the project with the group. She asked the other teachers how often they would commit to mentoring. T4 suggested once a fortnight. T1 though this too often and would not be able to commit to that. T5 suggested that they should aim for once a half term and if teachers felt they needed to meet more regularly then they could do so.

PB shared findings from research regarding mentoring. A handout was distributed to the teachers summarising the key findings. Most important messages highlighted were the need for a caring relationship between the two participants in each relationship. The need for structure without it being too rigid was also emphasised.

The mentoring handbook was shared with teachers. PB informed teachers that it was a working document and that their contributions to the document would be of importance.

T3 commented on behalf of the teachers that the book would be very useful and thanked PB for putting it together. Again PB reinforced that it was a working document and at the next meeting she would be pleased to hear ways it could be improved.

The teachers were given Betts and Neiharts Profiles of Gifted and Talented Individuals as outlined in the NCCA Guidelines. They were told that they could use the profiles as a means of gaining insight into the characteristics of the students they were mentoring and to identify approaches that might work with these pupils. Most of the teachers present seemed happy to use the profiles to assist them in gaining a greater understanding of their mentee. One teacher did have an objection. He was worried that the profiles were limiting and "pigeon-holing" the pupils

T2 commented that he was surprised by some of the profiles as he had not thought of gifted and talented pupils in this way before. T3 agreed. She said that the profiles would come in useful. T1 said he was uncomfortable with using the profiles. T1 said the idea of labelling pupils at all was something he had an issue with.

PB told the group that they were free to use the profiles or not but asked that they all read through them and to let her know whether or not they found them to be useful at the next meeting.

PB thanked everyone for their contribution. She apologised for "commandeering" so much of the time but that this meeting was an initial information session but that in future she looked forward to learning from the group about how they were finding the project.

Minutes of Mentoring Meeting October 9th

In attendance: P B, EF. EC, SK, SC, JL, CC

PB welcomed everyone and thanked them for attending the meeting and also for conducting their first mentoring session. Apologies from those with other lunch time commitments. Minutes from previous meeting shared. Proposed by SC and seconded by JL.

PB was excited to hear how it all went. PB invited responses from around the table.

T4 Met with student. Seemed like a nice student. Initial discussions identified areas that needed work and set targets.

T3 commented that she was surprised by the lack of interest and motivation X had around school. PB asked if this was a general finding. Most people agreed. T2 said he already found it frustrating to be working with someone with such potential but who clearly could not be bothered.

T5 disagreed and expressed concern about the student she is mentoring for completely different reasons. "She puts so much pressure on herself. She seemed so anxious at the first mentoring session. We actually had to do breathing exercises to calm her down a bit"

T1 was also concerned about his student but again for different reasons that T2. Student is extremely disorganised and does not engage with the mentoring in the manner that CC expected that he would do.

I actually had to lower my expectations when dealing with him. He was a lot more normal that I thought he would be"

PB: questioned the teachers as to the reason for the student underachievement. T1 said stress was disrupting her student's work. T4 said her student was a nice girl but just seemed so unmotivated. There was general agreement at this statement. PB asked how many people would consider a lack of motivation to be a key factor in underavhievement. All but one, T1, raised their hand.

It was decided that the uniting factor that all the students being mentored shared was their lack of motivation

Transcript of final meeting of Mentors. Recorded Friday 21st May 2010.

PB: OK, Everyone. Can we get started please? Thanks again for coming. I know everyone is so busy with exams at this stage and you must all be so tired so your continued commitment is really very much appreciated by the school and by myself. Can we start in the usual way with a quick round the room account of how things have been going. Can we start here on the right? Is that ok with you X?

T1: Okay, yeah I will start so. I have been just doing some exam prep with X now. He wanted me to go through a last minute study time table with him. He seems happy enough. I dip in and out of the booklet. It is good to have a bit of a structure to follow something to give me some ideas. All in all it has been fine the last few weeks.

T4: Same for me really. All has been fine

PB: Welcome ladies. We were just talking about how we have been getting on the last few weeks. X go on. Sorry.

T4: Yeah I was just saying things have been going well. I quite like X now. I will miss the mentoring next year. He was asking me the last day if I will be mentoring him next year. I'd like to.

T5: Yeah I was thinking the same. X asked if we would continue the mentoring next year. It would be a shame to sever the ties now. I suppose I've become quite attached to X and we get on really well. Teachers in the staffroom tell me she has settled down a lot and she seems much happier now too.

T7: I am the same as the others really. I have enjoyed it. The only difficulty I had was working out how much he was actually taking on board. But I enjoyed trying to get him to get there if you know what I mean. I think he took certain things on board. But not sure about others even though he told me he did.

T2: I don't have anything new to add. Just want to echo the sentiments already expressed.

PB: Thanks a million everyone. As you know, I have been mentoring X which has been interesting. We seem to have made some progress and I have been pleased to think that she now feels that there is someone she can talk to in school. Some teachers have observed an improvement but with others she still is not responding. She has set ambitious targets for her Junior Cert and I consider that in itself to be progress. That's about all really. Right, will we move on to more specific things. Do you all remember these? These are the NCCA guidelines that we looked at way back in September. Did anyone use them? If so how did you find them? Who wants to start?

T6: I used them a little. But to be honest I used them more to think about the pupils I am teaching as opposed to X.

T7: I really liked them. I used them to get X to think about how he was doing. I showed him the profiles and I got him to pick which one he thought he was. And then I told him I thought he was a challenging.

PB: How did he react to that?

T7: X was surprised when I identified that I thought he was a challenging. He saw himself more as an autonomous learner. I explained to him what qualities I saw in him and how he could improve his approach to learning and become an autonomous learner. I also used his summer test result to back up what I was saying to him. I think this really registered with him.

T5: That sounds great.

T1 It does. Doesn't it?

PB: An interesting idea X. Anyone have any other opinions?

T1: I know I am going to sound awkward now so sorry in advance. I just don't like the labels. I am just uncomfortable about labelling pupils at all. They are who they are. We can't put them in a box.

T5: I know what you mean but you don't have to look at it like that. You just need to look at them as fluid. Always moving. The label doesn't have to stick. The aim is to move the pupils on. The profiles give you an insight into how to do that.

T2: I agree with what X said at the start. I think they would be great for any teacher. I hadn't a clue that gifted and talented pupils could be so different from one another. It seems silly now but I suppose I guess I thought they were all kind of the same. One of the biggest learning curves for me in the whole thing was that I actually had to lower my expectations when dealing with him. He was a lot more normal that I thought he would be. I don't know why I expected him to be more articulate and mature because he was smart. These don't always amount to the same thing. He needed support in other ways.

PB: Can we take a show of hands. How many teachers found the profiles useful? One, two, three, four, five, six ok six and me seven. Great. Thanks. And x it is fine that you didn't. Everyone's view is important and it is important we get the whole picture.

PB: Right shall we move on to the next item. My next question is how did we all find the project in a practical sense? Does anyone want to comment on how they found the practicalities of it all?

T1: It wasn't always easy to find the time for it. Often times more urgent matters would mean I would have to cancel my mentoring session. That was not acceptable really but it was the reality of the situation.

T6: Yeah. Totally agree. It needs to be tied down more if it goes ahead next year. It was difficult to commit to it without getting swept up in the day to day work of teaching and then feeling bad because you were not doing a good enough job.

T2: For me a big issue there was the physical practicality of where to meet. The GP and glass offices are very public.

T6. But they needed to be. We couldn't really disappear off with the students.

T4. Catch twenty two. I don't know where the best place would be really.

PB: Okay. Let me just clarify what I have heard. There needs to be more structure in terms of when and where to meet. Teachers struggled to fit mentoring into their day to day schedules. Is that right?

Audible general consent.

PB: Also location was an issue. The need for privacy but also the need for the teacher to protect themselves.

Audible general consent.

PB: Great. Does anyone have anything else they wish to add.

T2: The whole thing ran very smoothly. Thanks and well done to you Pauline.

T5: Here here. The room, the lunch, it was all so thoughtfully put together.

PPB: And thank you all very much for your commitment. It is greatly appreciated both by myself and by the parents. And I am sure the students have expressed it themselves. I will tale your concerns to management and we will see if we can get any progress on these issues next year,

APPENDIX I

Teacher Feedback: Cyclical Reflections and Final Reports

T2

Mentoring Reflection (Cycle One)

Did you follow the advice for session 2? If yes, what worked and what didn't work? Please explain. If no, what did you do and did it work? Please explain.

Yes- introduced study skills. X seemed interested and willing to try new techniques. We will see how much he has actually done by next meeting and how much of this is actually lip service.

Look back on your notes from session 1. Do you still agree with the issues you identified for your student? How do you intend to address these issues in mentoring?

Yes- still agree. Will continue to review targets. Need to push X more. He comes across way more confident than he is. Despite the façade, he is actually very afraid to take any risks. He does not want to risk failing and this is why he lacks the belief to push himself. I need to convince him to push himself- that the risk will pay off.

What will you do differently in your next mentoring session?

I found the mentoring to be a great experience but I really struggled to find the time to meet the pupil this cycle. While I also thought that we should meet more, I struggled to find the time for the meetings that we actually had. I will need to be more organised and make time for meetings more in the next cycle.

T3

Mentoring Reflection (Cycle One)

Did you follow the advice for session 2? If yes, what worked and what didn't work? Please explain. If no, what did you do and did it work? Please explain.

Yes- we talked about study and its importance. It was a big step as she did not really have a buy in to it at the start. There seemed to be a disconnect between study and success in her mind. It was bizarre really. I was amazed that she really did not seem to have a clue what she could do if she put her mind to it. Hopefully she will use the techniques and see an improvement.

Look back on your notes from session 1. Do you still agree with the issues you identified for your student? How do you intend to address these issues in mentoring?

Yes- still same issues. Need to make a link between work ethic and actual success.

What will you do differently in your next mentoring session?

While it was good to have a mentoring book to help us to work out what we could do it was also good that we did not have to stick to it session by session. I needed to spend longer on target setting and monitoring. One session was no-where near enough. Next session I will not rush through things to just keep up with the booklet.

T5

Mentoring Reflection (Cycle One)

Did you follow the advice for session 2? If yes, what worked and what didn't work? Please explain. If no, what did you do and did it work? Please explain.

Yes I have followed both sessions now. It was good to have a written reminder of what I needed to do in each session.

Look back on your notes from session 1. Do you still agree with the issues you identified for your student? How do you intend to address these issues in mentoring?

Yes. X is an unusual case. She is not coping with the pressures of school. I feel that the mentoring is about making her accepting of her ability- explaining that she can only do her best.

What will you do differently in your next mentoring session?

Nothing really. So far so good unless there is something that X wants to do.

Final Report on Experience of Mentoring Project.

Describe your experience of participating in the mentoring project. (What did you like? What would you change?)You may wish to comment on the following:

The overall experience; progress you made with your mentee; things that may have impeded progress. Your use of the Mentoring Booklet; The Gnt Profiles; Your experience of working as a group;

I really enjoyed the whole process. I really developed a great relationship with my mentee and I think we both benefitted!

The mentoring booklet and the assigned times kept my focus on what I should have been doing. I think ▬ responded well to the structure.

The profiles made me look at ▬ in a different way. I was able to put myself in his shoes. I was surprised by the diversity of the profiles

The meetings were a great way of touching base with everyone.

Final Report on Experience of Mentoring Project.

Describe your experience of participating in the mentoring project. (What did you like? What would you change?)You may wish to comment on the following:

The overall experience; progress you made with your mentee; things that may have impeded progress. Your use of the Mentoring Booklet; The Gnt Profiles; Your experience of working as a group;

~~...~~ made great progress I feel during the mentoring. He became more organised and focussed in class. The mentoring booklet gave the whole thing a structure and focus. It meant we were less at sea.

The profiles were very insightful. I used them with ~~...~~. He was surprised when I interlyned that I thought he was a challenge. He saw himself more as an autonomous learner. I explained to him what qualities I saw in him and how he would ~~approve~~ sorry! improve his approach to learning and become an autonomous learner. I also used his summer test to back up what I was saying to him. I think this really registered with him.

PTO →

6

The meetings were a great benefit as well. I really enjoyed them! I loved meeting up with everyone & getting time to talk about what was happening with the students

More meetings next year please.

T6.

Final Report on Experience of Mentoring Project.

Describe your experience of participating in the mentoring project. (What did you like? What would you change?)You may wish to comment on the following:

The overall experience; progress you made with your mentee; things that may have impeded progress. Your use of the Mentoring Booklet; The Gnt Profiles; Your experience of working as a group;

Hard to put finger on benefits for ~~████~~. She just seemed to respond & become more mature. M.B-> great. Thanks. Profiles. - Even better. The profiles gave me an idea of what strategies could work to help Marie. Also I found them good because they helped me to see why Marie might not be performing despite having such great ability.

Working as a group - brilliant but shouldn't be at lunch. I had to

Final Report on Experience of Mentoring Project   (T4 submitted by e-mail)

Description of Experience:

Mentoring Meetings:

The organisation of the whole project was excellent from start to finish and this ensured that the whole thing ran smoothly. Thanks Pauline.

 The room was always set up for the meeting from the outset. The fact that lunch was provided also made it easier to handle the lunch time meetings

Mentoring Sessions

I loved being involved and getting to know my student and hope to mentor her next year. At the start she lacked motivation but as time progressed things improved and we got on really well. I could see her growing enthusiasm for school and learning.

The mentoring handbook was great for offering us guidance when we were mentoring. I liked how the reflection sheet was put in after each session even if I did not use it properly all the time!! (Sorry P!)

 I thought it was good how our ideas were later taken on board and used to change the booklet as it will be a very valuable resource for next year with a new batch of students.

Other Learning:

The profiles were a great help. Made me think about all the children I teach and look at them in a different way. I also used some of the strategies suggested along with the booklet in the mentoring sessions.

The metacognitive strategies were great too. V practical. Again useful both for mentoring and general teaching.

This was the most meaningful learning I have done since becoming a teacher. It benefitted me not only as a mentor but also in my teaching Thanks and well done on a super project!!!

APPENDIX J
Student Data: Sample Interview Transcripts
Sample Student Questionnaires

INTERVIEW STUDENT 2

Compared to the rest of the students in the class you're in, do you think you get things more easily?
Yes. I am usually able to understand things and others in my class need to ask questions

Do you think that if you worked harder than you are doing at the moment your grades would be better?
Yes because I've not been putting much effort into school and my grades have slipped. I think if I tried again I'd get my grades back up. I'm always tired though when I get home from school.

Why are you tired?
When I get up I'm not tired but I am when I go into the classroom

Do you think that understanding something faster than everyone else is a sign of being smart?
No. just because they understand doesn't mean they have good answers.

Do you think that most of your lessons are too difficult for you?
No. They are fairly easy I suppose.

Do you do all your homework?
No. it takes me an hour to do my homework but I'm tired when I get home and don't do it. I get into trouble for this

Do you have a quiet room to study in?
Yes

Do you read much in your spare time?
Most of the time. I read four or five chapters every day.

Do you think that any of your teachers push you too hard?
I don't think so, they could push me harder

Do you choose to work harder in some subjects more than in others?
Yes, in the ones I find more interesting or are good at. It doesn't usually have anything to do with the teacher.

Do you do any work out with homework?
Sometimes, I might do an hour of history then an hour of English

Do you think you know the best way to study?
No. I sometimes go off to find out what words mean and find I can only remember half.

If you lived on your own do you think you would do any homework?
Probably not. Parents are probably one of the reasons I do homework

Do you think it is the teacher's responsibility to get you to work at school?
No, it is my responsibility to make me work not someone else's.

If homework was optional would you ever do it?
Sometimes, it depends on the subject

Do you ever go back over work if you aren't getting a test in it?
Yes, in history I would make a head start on it and read ahead

When you get good grades do you feel proud?
Yes

What do you think when you don't get a great grade?
I think I need to study harder for the next test or sometimes I just forget about it.

Do you think your parents are happier when you get good grades?
Yes Definitely

And your teachers?
Yes

Look at this grid. In order to be a high achiever you need to have potential, opportunity, support and motivation. Which of these do you have?
Potential and support. Support from my teachers and family.

Do you have opportunity?
Yes. I probably don't have motivation as I'm always bored which makes me not want to do it

INTERVIEW STUDENT 3

Compared to the rest of the students in the class you're in, do you think you get things more easily?
Yes, the teachers go over things that I understand

Do you think that if you worked harder than you are doing at the moment your grades would be better?
Yes, I don't work hard enough and could get better grades. I do about an hour of homework and half an hour of study

Do you think that understanding something faster than everyone else is a sign of being smart?
Not really, you could be good at one thing and not another

Do you think that most of your lessons are too difficult for you?
No. They are usually easy.

Do you read much in your spare time?
Sometimes, I read fiction

Do you think that any of your teachers push you too hard?
No. I don't study because I'm lazy not because of them.

Do you choose to work harder in some subjects more than in others?
Yes, I put more effort in if the subject is harder and less if it is easier. I also won't work as hard if I don't like the teacher.

If you lived on your own do you think you would do any homework?
Yes, because I have to

Do you do homework every night now?
About an hour's worth.

Do you think it is the teacher's responsibility to get you to work at school?
No it is my responsibility

If homework was optional would you ever do it?
No, I'm too lazy

Do you ever go back over work if you aren't getting a test in it?
Yes, sometimes if I like it. The subject I mean.

When you get good grades do you feel proud?
Yes

Do you think your parents are happier when you get good grades?
Yes

And your teachers?
Yes

Look at this grid. In order to be a high achiever you need to have potential, opportunity, support and motivation. Which of these do you have?
I have potential, opportunity, support from parents but not really motivation. I only study if I have to

Do you know how to study?
Not really I just read over the chapter in a book

INTERVIEW STUDENT 4

Compared to the rest of the students in the class you're in, do you think you get things more easily?
Depends on the subject, in history I would but not in maths

Do you think that if you worked harder than you are doing at the moment your grades would be better?
I could but I really leave things to the last minute.

Do you think that understanding something faster than everyone else is a sign of being smart?
No sure. Maybe because I suppose you get things faster. So maybe that means you are smarter.

Do you think that most of your lessons are too difficult for you?
No, most are easy enough

Do you do your homework every night?
Yes

Do you have a quiet room to study in?
Yes

Do you read much in your spare time?
Not really

Do you think that any of your teachers push you too hard?
Not really. I don't think I'm pushed hard enough.

Do you choose to work harder in some subjects more than in others?
Yes, it depends on the teachers and whether they help you or not. It's better if they explain things rather than letting you do it yourself

Explain: I suppose if the teacher is nice about it and good at explaining I will work harder in that subject because that will mean…I mean ..that will make me like the subject.

Do you study when you're not told to/ don't have to?
Yes, I usually do. But only some subjects.

If you lived on your own do you think you would do any homework?
Yes, my mum gets home after I've done two and a half hours

Do you think it is the teacher's responsibility to get you to work at school?
Yes

If homework was optional would you ever do it?
No

Do you ever go back over work if you aren't getting a test in it?

No

When you get good grades do you feel proud?
Sometimes.

Do you think your mother is happier when you get good grades?
Yes I suppose she is. I guess.

And your teachers?
Don't know really. They don't really tell me.

Look at this grid. In order to be a high achiever you need to have potential, opportunity, support and motivation. Which of these do you have?
I definitely lack motivation but I also think I don't have enough support. So I am missing two things really

INTERVIEW STUDENT 5

Compared to the rest of the students in the class you're in, do you think you get things more easily?
No. Not really. I'm the same.

Do you think that if you worked harder than you are doing at the moment your grades would be better?
I could but I really leave things to the last minute.

Do you think that understanding something faster than everyone else is a sign of being smart?
No

Do you think that most of your lessons are too difficult for you?
No, most are easy enough if I do the work

Do you do your homework every night?
No. Sometimes. It depends.

Do you have a quiet room to study in?
Yes

Do you read much in your spare time?
Not really

Do you think that any of your teachers push you too hard?
Not really it's their job.

Do you choose to work harder in some subjects more than in others?
Yes, I work in the ones I find more interesting or are good at. It doesn't usually have anything to do with the teacher

Do you study when you're not told to?
What do you mean? Like, if it is not homework then I don't do it.

If you lived on your own do you think you would do any homework?
Probably not. I'm too lazy.

Do you think it is the teacher's responsibility to get you to work at school?
Yes

If homework was optional would you ever do it?
No

Do you always do your homework at the moment?
I try to get my homework done at school if I can. I don't do any study in the evenings and sometimes I do my homework just before the lesson starts. If I think the teacher can't see me I will maybe do in the lesson.

Do you ever go back over work if you aren't getting a test in it?
No

When you get good grades do you feel proud?
Sometimes. No sure.

Do you think your parents are happier when you get good grades?
I don't know.

And your teachers?
Probably. They give out less.

Look at this grid. In order to be a high achiever you need to have potential, opportunity, support and motivation. Which of these do you have?
"I definitely lack motivation but I also think I don't have enough support. So I am missing two things really

SA

Student Mentoring Reflection Sheet

1) Do you believe that you benefitted from the mentoring project? Explain why/ why not?

I do think I benefitted from the mentor project, mainly because I realised that I now have a purpose to study for exams because they are what will affect my future job.

2) Which (if any) of the organisation tools (SQ4R, Mindmapping, study planning etc) did you find most useful? Why?

I didn't find these organisation tools useful. I found that my own 'technique' of learning by reading and writing out what I had read works best for me.

3) Do you think you have changed in any way this year as a result of the mentoring project? If so, how? If not, why not? (e.g. I work harder, I am more organised, I am happier in school...)

I think my attitude towards exams have changed in the fact that I know they are not just tests, but tests that will influence my college / course choice eventually.

4) Can you think of any way the mentoring project could be improved?

I think that more people should be involved. I think that we should have been told why we were chosen and not just aked why we think we were chosen. to be involved in this mentor programme.

5) Why do you think **you** were selected to be involved in the mentoring project?

I think I was selected because I was not working hard enough in school but still getting good results and teachers saw I could do alot more work and get better.

6) Did your friends know you were involved in the project? If so, did you talk about it to them? Did you mind that they knew?

Yes they knew I was involved. I didn't mind they knew about it. I just told them about the new types of study techniques.

7) Were you taken out of academic classes for mentoring? Did you feel you missed out on school work?

I was taken out of only one or two academic classes. The rest were SPHE or CSPE class when I didn't miss much.

8) Did other teachers ever mention the project to you?

No.

9) Is there anything else you think it is important to say?

Please return this form to Ms. Burke. If you have any reflections that you kept along the way, you may also hand them up with this form or separately.

Student Mentoring Reflection Sheet

SB

1) Do you believe that you benefitted from the mentoring project? Explain why/ why not?

Yes, because I quietend down a lot in class and have kept on top of my schoolwork + study.

2) Which (if any) of the organisation tools (SQ4R, Mindmapping, study planning etc) did you find most useful? Why?

Study planning was the most effective for me. It helped me study efficiently and cover a lot more work than I usually would.
mindmaping was helpful for science and English because it was fast and easy to use and remember

3) Do you think you have changed in any way this year as a result of the mentoring project? If so, how? If not, why not? (e.g. I work harder, I am more organised, I am happier in school...)

Yes. I'm more organised and my behavior has improved dramatically and my grades have gone up.
I worry less about homework + study now because I have learned to plan ahead.

4) Can you think of any way the mentoring project could be improved?

More often.

5) Why do you think **you** were selected to be involved in the mentoring project?

because i was underachieving

6) Did your friends know you were involved in the project? If so, did you talk about it to them? Did you mind that they knew?

yes. yes+no it made no diffrence what so ever they thought it was a good idea.

7) Were you taken out of academic classes for mentoring? Did you feel you missed out on school work?

geography once,+SPHE.

8) Did other teachers ever mention the project to you?

yes, MRS. McElligot.

9) Is there anything else you think it is important to say?

Please return this form to Ms. Burke. If you have any reflections that you kept along the way, you may also hand them up with this form or separately.

Student Mentoring Reflection Sheet

SP

1) Do you believe that you benefitted from the mentoring project? Explain why/ why not?

Definetly, I doubt I would have lifted a finger for the Junior Cert had I not partaken. It made me realise there is actually a point to the exam and it's worth working for.

2) Which (if any) of the organisation tools (SQ4R, Mindmapping, study planning etc) did you find most useful? Why?

Probably the Universal folder, as it really helped me get organised as far as sheets are concerned, the study plan also made a huge difference, as it helped me to focus on the more important aspects of various subjects & spread my time properly.

3) Do you think you have changed in any way this year as a result of the mentoring project? If so, how? If not, why not? (e.g. I work harder, I am more organised, I am happier in school...)

Why more organised and definetly more content in school as I find I meet with far less conflict then in previous years.

4) Can you think of any way the mentoring project could be improved?

Expand, it's working well and I'd recommend it for any student.

5) Why do you think **you** were selected to be involved in the mentoring project?

No Idea. I presume someone had their reasons.

6) Did your friends know you were involved in the project? If so, did you talk about it to them? Did you mind that they knew?

A few, it didn't really come up very often in conversation & I don't no how they knew but it didn't really make a difference.

7) Were you taken out of academic classes for mentoring? Did you feel you missed out on school work?

Not really as we always planned when to take the class beforehand which stopped me from missing out on anything exceptionally important.

8) Did other teachers ever mention the project to you?

No.

9) Is there anything else you think it is important to say?

Please return this form to Ms. Burke. If you have any reflections that you kept along the way, you may also hand them up with this form or separately.

Student Mentoring Reflection Sheet

SF

1) Do you believe that you benefitted from the mentoring project? Explain why/ why not?

yes I do think that I benefitted from the project because it made me think about how I was studing and how I could improve. it. It allowed me to set targets and it helped me motivate me.

2) Which (if any) of the organisation tools (SQ4R, Mindmapping, study planning etc) did you find most useful? Why?

The study planning because it made me see what my time frame was and how much time I had to spend on each subject. Mindmapping was also helpful but only to a certain extent because it could only be used in certain subjects. eg. not suitable for languages or maths or science.

3) Do you think you have changed in any way this year as a result of the mentoring project? If so, how? If not, why not? (e.g. I work harder, I am more organised, I am happier in school...)

yes I have changed, I work harder in school and it has helped me to mature and focus, I am also a lot calmer in school and get on better with my teachers.

4) Can you think of any way the mentoring project could be improved?

If another group of students were to be selected the privacy should be emphasised. Also the meetings should be increased to once a month as opposed to once a term. if possible.

5) Why do you think **you** were selected to be involved in the mentoring project?

I think I was selected because I was not working as hard as I should have been in class or at home.

6) Did your friends know you were involved in the project? If so, did you talk about it to them? Did you mind that they knew?

Yes, they did know, although it was supposed to be private they all found out about it any way. We did talk about it and a lot of them were upset that they had not been chosen and I would have much rathered that they knew nothing about it.

7) Were you taken out of academic classes for mentoring? Did you feel you missed out on school work?

No, I was pulled out of some academic subjects but it wasn't hard to catch up because I was able to get my homework at the end of the lesson any way.

8) Did other teachers ever mention the project to you?

Yes, I did not want them to, especially in front of the class. It was only one teacher though so I wasn't too bothered by it.

9) Is there anything else you think it is important to say?

Thank you for all of the help! :)

Please return this form to Ms. Burke. If you have any reflections that you kept along the way, you may also hand them up with this form or separately.

TRANSCRIPT OF FINAL STUDENT FOCUS GROUP 1

PB: Hi everyone. You are all welcome here to have a short chat about the mentoring project. I want to thank you all for coming and for cooperating so well with your teacher mentors so far. It is important for me to stress to you today how important it is that you give me honest feedback and that means telling me what you thought worked as well as what you thought didn't work for you. This is important because if we are going to run the mentoring project next year, it has to be as good as it can be and there is no point wasting time on parts if you did not find that they worked for you. Do you all understand that?

PB: Ok well you are all nodding so I will take that as a yes. So what I am planning on today is talking about the different aspects of the questionnaires you all filled in so that I can get a sense of whether or not everyone feels the same. Don't be afraid to disagree or agree with someone- everyone in this room has a very useful and valid opinion. We need to hear what everyone things so we can get a clear picture. Okay?

PB: So we will begin with a positive. What was the best thing for everyone about being in the mentoring project? We will all take turns to answer that one. Do you want to start S4?

S4: Getting to know my mentor was good. He helped me to make checklists.

PB: Explain what you mean.

S4: Study checklists so I would organise myself a bit more.

PB: Great. Next up?

S1: Having a folder where I could keep all my stuff. That was good. Meant getting into trouble less. I was more organised.

PB: But don't you learn about organising and structuring your work in SPHE class?

S1: We don't really think that what we do in SPHE is any good

S2 Yeah. No-one really takes SPHE that seriously. We don't link it up to what we are doing in our other subjects really. It is just a separate class.

PB: Okay S2. What was the best thing for you?

S2: Being involved in it at all. I wasn't sure I was any good at school. I didn't think I would be picked for this. But when I was I could see that teachers believed in me a bit.

S6: Yeah me too. I think I might actually do well enough in school now

S1 I worry less about homework and study now because I have learned to plan ahead

PB: So far most of you have mentioned organising yourselves and structure. Two students didn't mention structuring at all in their feedback sheet. Does anyone want to hazard a guess as to why that was? Did they not find these organisation techniques useful then?

S2: That was me. I didn't have a problem organising myself. I knew how to do it but I couldn't be bothered.

PB: Wow. Can you explain that a little bit more?

S2 I guess I just didn't see a point in what we were doing in class. I didn't think I was very good at school anyway and I didn't see any point to what we were doing.

PB: And now?

S2: Now I can kind of see alright.

PB: Now that you know how to study. Are you studying more?

Audible chorus of positive

PB: Would you be doing that anyway because of the Junior Cert?

S6: Yeah I would probably be studying more anyway. But I know ways of studying now that I didn't know before.

PB: Such as?

S6: You know the SQ4R and stuff.

PB: Anyone use any of the others?

S4: Study checklists and time tables.

PB: Okay. So I am conscious that the bell is going to go soon. Any ways that the mentoring could be better? Remember I want honesty in this.

S2: More of it. For more people in school like.

S4: Yeah definitely. Lots of my friends could do with it.

PB: Anything else? (Pause) Okay. You're all talked out. Thanks a million again. Ye can head back to class now if there is nothing else ye want to say? Okay. Bye then.

Appendix K

Parent Data: Focus Group Minutes and Feedback Sheets

Minutes from mentoring meeting with parents.

PB introduced self and explained project. Used ppt to introduce the main ideas.

Invited parents to express concerns. Identify areas that they hoped would be dealt with in the mentoring.

P1:"He doesn't open a book. His grades have fallen. I am very worried about him"

P2 (response to ppt) That sounds fantastic. He definitely would benefit. I can't get him to do any work at all. If I nag him anymore he will call childline".

P3: My concern is that he is hopelessly disorganised. There are bits of him all over the place. The amount of notes I get in that journal. Just because he didn't have this book or something else. I don't know what he is thinking about half the time

PB showed parents Eyre's diagram Asked to identify missing ingredient. Consensus among the parents that motivation was a key ingredient that was missing.

P6 commented that yet they wanted to do well. When told about the mentoring proect her daughter had responded "They picked me. I can't believe they picked me".

All parents agreed that the mentoring had potential to be a very positive intervention.

The next issue was what the students would say to their peers.

A parent said that her child had been told about the project and was concerned she was going to be stuck with a pack of nerds. The parent told the child the degree to which her peers needed to know was up to the child and it was agreed that this was a good approach.

Other parents said their child would not be bothered at all and should be free to discuss it with their peers and in fact that they had already. Again, it was decided that each child would find their own way suitable to them and that there was no need for a diktat for every child to be dealt with in the same way or to deal with it in the same way. However it was generally agreed that the school would deal with the topic as discreetly as possible.

Parents requested information re what would happen at each session. It was agreed that PB would correspond with parents via e-mail.

PB promised to send parents copy of the SESS metacognition document via e-mail also.

Parent Feedback Sheet

1) **What do you perceive to be the benefits (if any) of your child participating in the mentoring project?**
a)   Gave confidence to X in knowing that other people, apart from her parents, believed she had ability that she herself was doubting.
b)   By making her set short term and long term goals it made her think about what she was doing and helped her understand better what she could and should achieve through her school work.
c)   By showing her study and planning techniques and making her aware of better time management and organisation her work became more focused.
d)   Having the opportunity to talk to a teacher about general things not related to a specific subject been taught by that teacher, made her realise that there was somebody she could approach about school related issues if she needed to.

2. **As parents, were you sufficiently well informed about the project?**

Yes we were given good information at the initial meeting about the purpose and aims of the mentoring project. It would have been better if we had a brief update during the project just to inform us about whether the mentor had the opportunity to meet with the student and an outline of what they had agreed eg goal setting or which techniques they had agreed to try to use to improve study habits. X was not always forthcoming about when she met with her Mentor and about what they had agreed to do. As parents we home we would have been better able to reinforce and encourage whatever methods had been agreed upon. At the end it would have been nice to know from the Mentors if they felt that the students had taken on board the advice that they had been given.

3. **Have you got any suggestions as to how we could improve on the project for next year?**
I would give serious consideration to begin Mentoring in second year to give the students a chance to practise their new approach to learning so that it would benefit them more in 3rd year.
Give brief updates during the project to parents so that they can reinforce the study techniques at home.

4) Do you have anything else you would like to add?
X benefitted from this project in many ways and her school performance improved dramatically. I cannot pinpoint exactly which aspect of the project had the biggest effect in her case. I would highly recommend it for other students and I hope it can continue and expand in size in the school. It is certainly a good way to ensure that students who might otherwise "drift" through their secondary school years will achieve their maximum potential.

Pauline

A little bit of feedback for you...

I was absolutely thrilled that you and the school offered X the opportunity of the mentoring project. I was even more delighted she herself chose to participate. But at the start of it she did not show much commitment - I saw very little evidence of the skills and techniques in use. I wondered about how seriously she took it and to be honest I thought partly X saw it as a time to get out of class. At this stage however I can see great progress in my teenager. Some of it natural progression - I like to think she is maturing and that some of the guidance I have given at home has paid off. Clearly it has. But I would also like to acknowledge your own input. While I know that Gabrielle can still act up and even mitch the very odd time, I see great progress recently. She has really benefited from the feeling that she has a coach and ally at school - even though this can (rightly) challenge her and her behaviour at times.

Here are some of the changes I see...

Firstly she has acknowledged that she has an anger management issue. Her self awareness has grown hugely. Now she can talk to me about these things, even though she feels uncomfortable doing so. Her openness and honesty has taken on new proportions. She also sees now for herself that after school study this term has paid off. And believe it or not she got a merit card from Ms X during Home Econ recently (though she would not always admit it, this means an awful lot to her. You might DISCRETELY let Ms X know that).

 There are lots of other really positive signs of maturity - good analysis about friends, situations, her views on school, her OWN hopes and expectations of herself.

I know X has talked to you about some of these things. Just to let you know from my point of view if X changes her mind about transition year or subject choices, I am open to these things. (Though I would still like her to keep her later options open by having a good mix of subjects).

In any case I just want to say thank you. Also the metacognition document you sent us parents is brilliant. I use ideas from it daily at work!

Kind regards
XX

APPENDIX L

Reflective Journal

September 3rd 2009.

I am feeling a bit nervous about addressing the whole staff today. I have a feeling that a considerable number of them may not welcome input from such a junior member of the staff. Need to do it though as the project needs to be open to all members.

Meeting with team after lunch will be better. Had to set up P Room for meeting. Had to tyoe out and photo copy agenda.

Will have to phone the parents of the students being mentored to organise a meeting. Lots more organising than I anticipated at this early stage.

September 4th.

Very pleased with meeting yesterday. Teachers seemed interested and enthusiastic. Two new people as a result of whole staff address. Result!

Need to book meeting room for October meeting, make contact with parents, summarise minutes for teachers.

Mentoring Reflections   October 15th

Meeting time is very necessary. People do not read written instructions.
It is hard to get everyone together to meet. The school needs to support it.

Giving teachers folders and notebooks etc works well. It means that they keep their notes together. Also providing food helps.

The immediate impact of the mentoring was positive. Created good feeling for both teachers and students. Immediate improvements were obvious. However lack of contact for another 5 weeks meant students did not sustain improvements. Need for more frequent mentoring sessions.
Positive feedback:

Appendix M

Extracts from: *Metacognition for the classroom and beyond: Differentiation and support for learners.*

APPENDIX N
Mentoring Handbook

Mentoring Handbook

Mentoring Handbook

Introduction

I wish to begin by thanking you for participating in the mentoring project for the year 200-2010.

Our findings last year indicated that a selection of students might benefit from one to one input. This year we will pilot this idea with six students. We will examine Positive Psychology and Metacognition as part of the process. Please refer to metacognition handbook for further information on this.

In the upcoming pages, please find initial suggestions for how to organise your mentoring sessions. Please also remember that as each student is different, their needs will be different so some approaches may work better than others. You can use your professional judgement in these cases. You may choose to use all or none of the following material but please record your findings at the end of each session.

Prior to commencing a mentoring session, you may choose to discuss the student you are mentoring with some of their teachers. This could help you to form a picture of some of their needs.

Best of luck and many thanks again. Please feel free to find me and talk about this any time.

Session 1: Getting to know the student and setting targets.

Session 1 should be an informal opportunity for you to get to know the student you are mentoring. In this session you should explain to the student the reason they were chosen to participate in the mentoring session.

You may want to discuss some of the following areas with the student:

•   How much study/homework they do. Subjects they feel they are good at and subjects in which they feel they could improve.
•   Their study conditions at home- do they have a quiet place in which to work etc.
•   Their relationships with their teachers- do they find themselves getting into trouble. If so, why? How might their school experience be improved?
•   Their ambitions for the future- what career they may be interested in etc.

You should try not to pass judgement on the student for opinions they express. Try mirroring some of their statements back to them to get them to think about areas that they can improve upon. It is much better if they arrive at a destination by themselves! Close the mentoring session with target setting based on the discussion.

Three targets should be set: Short, Medium and Long Term targets.

Introduce students to the concept of SMART (Specific, Measurable. Achievable, Realistic and Time related) targets. Emphasise for students the need for discipline to achieve the targets. Explain that the targets are not set in stone and can be reviewed and revised regularly. The targets should be reviewed in session 2.

Please find time to fill out the mentoring reflection sheet at the end of each session.

Mentoring Reflection

Did you follow the advice for session 1? If yes, what worked and what didn't work? If no, what did you do and did it work?

From your initial mentoring session what key areas do you feel you need to work on with your student?

What will you change in your next mentoring session?

Session 2:   Focus on structuring study

1.   Review of targets set in Session 1

Begin session 2 with a review of targets set in session 1.

If short term target has been achieved, commend student and set a new short term target.

 Review progress made in achieving medium term target. Ask if student is still happy that this is a SMART Target. Do they still feel it is achievable? If so, what have they been doing in order to attain the target? If not, tweak or change the target as appropriate.

2.   Introduction of study skills and time management.

Discuss with student their current approach to homework and study. Is it the best possible approach? Do they manage their time efficiently? You may want to introduce ideas to make study more efficient:

The Homework Diary- Are they using this effectively? Is all homework taken down? Do they write down the due date of longer projects? Do they put in reminders for projects due etc?

Doing homework- Conditions for homework. Do they work in a quiet room without distractions? Do they do their work in a particular order? (eg. Begin with subjects they find more difficult or they expect to take the longest so that they are not tired) Do they always take down and do their learning homework?

Study Do they do any additional study or revision? You may want to discuss the importance of this also.
Before finishing remind student of targets and check to see if they want to change targets based on your discussion.

Mentoring Reflection (Cycle One)

Did you follow the advice for session 2? If yes, what worked and what didn't work? Please explain. If no, what did you do and did it work? Please explain.

Look back on your notes from session 1. Do you still agree with the issues you identified for your student? How do you intend to address these issues in mentoring?

What will you do differently in your next mentoring session?

Session 3: Study skills

Begin by discussing and reviewing targets. Adjust as necessary. Use praise to acknowledge the effort made to ensure that targets were met.

Ascertain whether the students introduced any changes as a result of the previous mentoring session.

In this session, students' views of intelligence and ability should be teased out. Many students who possess a lot of ability are afraid to test the limits of their ability because they are afraid of failure. Also many students believe that their ability is fixed and there is nothing they can do to change it. Try to get students to understand some key points within the discussion:

•   Effort is more important than outcome. Developing a good work ethic will benefit you throughout your life. If you try something and fail, don't take it personally. Learn from your mistakes and try again. If we learn from our mistakes, failure can actually be a good thing. Examples of famous people who failed at first but kept on trying:
•   Henry Ford: While Ford is today known for his innovative assembly line and American-made cars, he wasn't an instant success. In fact, his early businesses failed and left him broke five time before he founded the successful Ford Motor Company

•   Bill Gates: Gates didn't seem like a shoe-in for success after dropping out of Harvard and starting a failed first business with Microsoft co-founder Paul Allen called Traf-O-Data. While this early idea didn't work, Gates' later work did, creating the global empire that is Microsoft

•   Albert Einstein: Most of us take Einstein's name as synonymous with genius, but he didn't always show such promise. Einstein did not speak until he was four and did not read until he was seven, causing his teachers and parents to think he was mentally handicapped, slow and anti-social. Eventually, he was expelled from school and was refused admittance to the Zurich Polytechnic School. It might have taken him a bit longer, but most people would agree that he caught on pretty well in the end, winning the Nobel Prize and changing the face of modern physics.

•   Isaac Newton: Newton was undoubtedly a genius when it came to math, but he had some failings early on. He never did particularly well in school and when put in charge of running the family farm, he failed miserably, so poorly in fact that an uncle took charge and sent him off to Cambridge where he finally blossomed into the scholar we know today

Other examples are Van Gogh, Steven Spielberg, Winston Churchill.

The second point you need to make is that ability and intelligence are not "fixed". Yes, some people are lucky enough to possess more innate ability than others but it is what you do with that that matters. You may choose to use the example of a sports person or a musician. If someone is a gifted pianist but they never practice, they may not do as well as someone who is moderately good and practices everyday. The same can be said about an athlete. Intelligence is no different. We possess innate ability but in order to make the most of the ability we need to train our brain.

Use this discussion to impart the importance of doing your best and getting the best out of educational opportunities. You may choose to introduce students to some of the strategies outlined in the Metacognition resource designed by the SESS. SQ4R and Mind Mapping were both found useful by the students.

You may choose to get students to consider how they study best. Reflective Diaries and Reflection Sheets could be useful here. Students were encouraged to monitor their own performance by using the learning diary.

Mentoring Reflection

Did you follow the advice for session 3? If yes, what worked and what didn't work? Please explain. If no, what did you do and did it work? Please explain.

Are you pleased with the progress your student is making? If yes, please give reasons. If no, explain why.

Will you change anything in your next mentoring session?

Session 4: Career Investigation

Review targets and adjust as necessary.

Mentors might at this stage get students to investigate potential careers and the academic requirements for the career.
Areas to focus on: What subjects do you need? What points would you need? Where is the course offered? Research the different courses.

 Another exercise linked to this is getting students to imagine their best possible future selves and their worst possible future selves and to explore the choices they would make to get them to where they wanted to be. (This is an exercise more suited to uncooperative students)

Students are to return with their findings at the next mentoring session.

Mentoring Reflection

Did you follow the advice for session 3? If yes, what worked and what didn't work? Please explain. If no, what did you do and did it work? Please explain.

Are you pleased with the progress your student is making? If yes, please give reasons. If no, explain why.

Session 5: Exam Time

In this session help your mentee plan their study time table and revise for their exams.

It might be a good idea to look at the mock exam results and to build around those targets for the actual exams.

Resources you may need:
Target setting sheet (see moodle)

Study timetable template (available on moodle)`

At this stage, you will be very much aware of the strengths and areas for improvement for your own particular student.