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Academically able boys' perceptions of their learning: a grounded theory analysis.

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## **Abstract**

In one secondary school in Scotland, there was a trend that girls performed significantly better than boys at the more challenging levels of external examinations. The focus of this thesis has been an exploration of 16 to 18-year-old, academically able boys' perceptions of their learning in this school, to seek an explanation for this phenomenon.

The literature review considers the concept of gender in education; the policy landscape and national attainment data in relation to gender and attainment; and the key reviews/studies carried out in this field to provide governments with a deeper understanding of gendered performance, and recommendations for educational professionals to bring about improvements. These reviews/studies focused on all boys and not on this particular subset of academically able boys.

A central issue in gender equity in education is the lived experiences of different groups of learners in schools. The stance taken in this research is to consider the learning of selected boys (who are high attaining, or who have the potential to achieve highly academically) from the senior year groups in one school by exploring, through interview, their personal experiences, views, perceptions and opinions about learning: the factors that facilitate and hinder progress in learning. For the case study approach adopted, groups of girls, teachers and parents in the school were also interviewed to triangulate the findings from the boys' interviews. A grounded theory approach, using methods developed by Strauss and Corbin (1990, 2008) and Glaser (1992), and supplemented by techniques advocated by Charmaz (2014), was used for the interviewing and the analysis of the empirical data collected: using line-by-line coding, conceptualisation, categorisation and theory generation. The advantage of grounded theory is that it is 'grounded' in the empirical data. This interpretative approach makes no attempt to select and 'test' factors that could be influencing the phenomenon, rather exploring widely to seek understanding from the perspective of the subjects.

The grounded theory that emerged from the case study in School A was that these boys realise what is required of them to be successful in their learning, and what hinders their learning, but their success is limited by adopting an essentialist construction of their gender with gender stereotypical characteristics.

The phenomenon is not unique to this one school and so a similar case study approach was undertaken in two further schools, Schools B and C, to consider the transferability of the theory emerging from the data collected in School A. School B had a similar gendered attainment profile to School A, whereas in School C there was little or no difference in attainment by gender.

The thesis concludes with some recommendations for policy and practice: professional learning of teachers, working with parents on understanding gender, and the privileging of 'pupil voice' as a way of exploring issues such as gender.

## Contents

Abstract .....	2
Tables and figures .....	7
Acknowledgements .....	8
Author's declaration .....	9
<b>Chapter 1: The context and the purposes of the study .....</b>	<b>10</b>
1.1 Chapter overview .....	10
1.2 Introduction .....	10
1.3 Synopsis of thesis .....	11
1.4 The concepts of attainment, achievement and 'underachievement' .....	13
1.5 Professional context .....	14
1.5.1 School improvement .....	15
1.5.1.1 Rationale and vision of a new management structure .....	15
1.5.1.2 Pupil support service .....	16
1.5.1.3 Outline of the management structure .....	17
1.5.1.4 Focus on learning and teaching .....	18
1.5.1.5 Professional learning .....	18
1.5.1.6 Self-evaluation .....	19
1.5.1.7 Strategies to improve attainment .....	20
1.5.1.8 Impact of mentoring and support on attainment .....	20
1.5.1.9 Intervention in 2010 improve support for some boys .....	21
1.6 Purposes of the research study .....	23
<b>Chapter 2: The research questions and the statistical background .....</b>	<b>25</b>
2.1 Chapter overview .....	25
2.2 Introduction .....	25
2.3 Research questions .....	26
2.4 Explanation of the statistics presented .....	27
2.5 Gendered patterns of attainment from the statistics .....	28
2.6 Concluding remarks .....	34
<b>Chapter 3: The concept of gender in education .....</b>	<b>35</b>
3.1 Chapter overview .....	35
3.2 The significance of gender in education .....	36
3.2.1 Historical perspective .....	37
3.2.2 'Crisis' of boys' underachievement .....	39
3.3 Gender and gender identity from a feminist stance .....	42
3.3.1 Modernist stance .....	42
3.3.2 Postmodernist/poststructuralist stance .....	44
3.3.2.1 Sociological/cultural stance .....	45
3.3.2.2 Philosophical stance .....	46
3.3.3 Different feminist stances: Is there mutual exclusivity? .....	49
3.4 The contested nature of gender and gender identity .....	50
3.5 Gender in the classroom .....	52
3.5.1 Identity and the classroom .....	52
3.5.2 Relationality .....	53
3.5.3 Classroom policy and feminist solutions .....	55
3.6 Intersectionality .....	58
3.7 Concluding remarks .....	61
<b>Chapter 4: Gender and Attainment .....</b>	<b>62</b>
4.1 Chapter overview .....	62
4.2 The policy context - equality .....	62
4.2.1 A Scottish policy perspective .....	62
4.2.2 The research findings of policy impact in Scotland .....	74



4.3 Gendered patterns of attainment - UK .....	80
4.4 International perspective: Gender: Attainment.....	82
4.5 Accountability: gender and attainment .....	83
4.6 Concluding remarks .....	84
<b>Chapter 5: Studies on factors/influences and interventions .....</b>	<b>86</b>
5.1 Chapter overview .....	86
5.2 Introduction .....	86
5.3 Overview of factors and explanations for the gender difference in attainment outcomes.....	87
5.3.1 External factors.....	88
5.3.2 In-school factors .....	89
5.4 Analysis of the key studies.....	91
5.4.1 Response to policy.....	91
5.4.2 Chronology .....	92
5.4.3. Focus on academically able pupils.....	92
5.4.4 Methodology of the study.....	93
5.4.5 Factors proposed to explain differential patterns of attainment amongst boys and girls.....	94
5.4.6 Strategies and interventions.....	97
5.4.7 Impact .....	98
5.4.8 Conclusion - the key studies.....	99
5.5 Concluding remarks .....	104
<b>Chapter 6: Research methodology .....</b>	<b>106</b>
6.1 Chapter overview .....	106
6.2 Rationale for the study and the methodology .....	106
6.3 Theoretical perspective .....	108
6.3.1 Research Paradigm .....	108
6.3.2 Grounded theory .....	110
6.3.3 Case study methodology .....	112
6.3.3.1 Validity, Reliability and triangulation.....	116
6.3.3.2 Researcher as research ‘tool’ .....	118
6.4 Methods employed to gather qualitative data through interview.....	121
6.4.1 Ethical approval.....	122
6.4.2 Sampling – Selection of participants.....	123
6.4.2.1 In School A.....	124
6.4.2.2 In Schools B and C.....	129
6.4.3 Interviewing.....	132
6.4.4 Interviewing process.....	133
6.4.4.1 Interview protocol .....	133
6.4.4.2 Focus groups .....	134
6.4.4.3 Questioning .....	137
Transcription of interviews .....	140
6.5 Data analysis using a grounded theory approach.....	141
<b>Chapter 7: Discussion of the methodology for data analysis – the grounded theory approach.....</b>	<b>142</b>
7.1 Chapter overview .....	142
7.2 Principles of analysis .....	142
7.2.1 Definitions of terms.....	143
7.2.2 Process of analysis.....	148
7.2.3 Induction, deduction and abduction .....	151
7.2.4 Impact of researcher on analysis .....	152
7.2.5 Saturation.....	154
7.2.6 Conceptualisation, categorisation and context .....	156

7.2.7 Perspectives on ‘emergent’ theory .....	158
7.3 Analytical method (including diagram of process).....	159
<b>Chapter 8: Presentation of the grounded theory analysis of the empirical data gathered through interview.....</b>	<b>163</b>
8.1 Chapter overview .....	163
8.2 Research questions.....	163
8.3 Rationale for presentation of analysis of empirical data.....	163
8.4 Presentation of analysis: School A – boys.....	166
8.5 Comparison between the findings from the individual boys’ and the focus groups of boys’ interviews in School A.....	170
8.6 The emergence of a tentative theoretical framework based on the boys’ views.....	171
8.7 Presentation of analysis: School A – girls, teachers and parents .....	172
8.8 Comparison between findings from the girls’ focus groups and the boys’ focus groups in School A.....	175
8.9 Comparison between the findings from the teachers and the boys in School A .....	178
8.10 Comparison between the findings from the parents and the boys in School A .....	182
8.11 Triangulation of findings in School A .....	184
8.12 Presentation of analysis: School B – boys, girls and teachers .....	186
8.13 Triangulation of findings in School B .....	192
8.14 Presentation of analysis: School C – boys, girls and teachers .....	193
8.15 Triangulation of findings in School C .....	198
8.16 Comparison of findings from all three schools.....	198
<b>Chapter 9: Discussion of the analysis of the findings from all three schools .....</b>	<b>200</b>
9.1 Chapter Overview .....	200
9.2 Boys’ perceptions of their learning (in School A) .....	200
9.2.1 Self-awareness of effective learning and the barriers to effective learning .....	201
9.2.1.1 The learning experience .....	202
9.2.1.2 Involvement of parents.....	209
9.2.1.3 Personal characteristics of boys from their perspective .....	210
9.2.2 Perceptions of gender identity.....	213
9.2.3 Summary .....	217
9.3 Transferability .....	218
9.4 Emergent grounded theory.....	218
9.5 Concluding remarks .....	219
<b>Chapter 10: Summary and recommendations .....</b>	<b>220</b>
10.1 Chapter Overview .....	220
10.2 Review of the study’s purposes .....	220
10.2.1 Literature review and policy background.....	221
10.2.2 Methodological approach .....	223
10.2.2.1 Evaluation of the grounded theory approach .....	224
10.2.2.2 Evaluation of the case study approach .....	230
10.2.3 Findings.....	232
10.2.3.1 Response to the research questions .....	232
10.2.4 Conceptual mapping.....	236
10.2.4.1 Emergent grounded theory .....	241
10.2.4.2 Critique of the theory .....	241
10.3.4 Recommendations for policy and practice .....	242
10.3.4.1 Policy and practice related to policy .....	243
10.3.4.2 Recommendations for schools .....	243

10.4 Summary .....	249
10.5 Learning transcending gender? .....	253
Appendix 1: School A's attainment data for S4 and S5 - 1999 to 2002.....	254
Appendix 2: School A's attainment data for S4 and Higher for 2002 and 2003 Respectively .....	256
Appendix 3: School A's attainment data for S5 -1999 to 2012.....	257
Appendix 4: School A's attainment data for S4 and S5 - 1999 to 2012.....	258
Appendix 5: 2010 attainment data for School A's comparator school group and other high achieving mainstream secondary schools in Scotland (run by local authorities) .....	260
Appendix 6: Test for statistical significance – t-test.....	261
Appendix 7: Literature review methodology .....	263
Appendix 8: Comparative analysis of ten key studies (1996 to 2008) .....	264
Appendix 9: Sample of consent form and plain language statement.....	270
Appendix 10: Explanation of the process of coding, conceptualisation and categorisation of the data (illustrated in Fig. 7.1) .....	273
List of references.....	282

## Tables

Table 2.1: S4: Differences in % between males and females .....	29
Table 2.2: S5: Differences in % between males and females .....	30
Table 4.1: Percentages of S4 males and females gaining five or more Standard Grade awards in 1999 .....	78
Table 4.2: S4 pupils achieving Standard Grades by gender, 2004/05-2006/07 .....	80
Table 6.1: Definition of a case study .....	114
Table 6.2: Boys selected for individual interview in School A .....	126
Table 6.3: School A – Groups interviews.....	127
Table 6.4: Staff interviewed in School A broken down by subject and gender.....	128
Table 6.5 School B – School with similar demographics and attainment profile.....	131
Table 6.6 School C – School with similar demographics and a different attainment profile ..	131
Table 8.1: Coding for the individuals and groups interviewed.....	166

## Figures


Fig 2.1: S4 'whole school' performance data for '5+ Level 5' .....	32
Fig 2.2: S5 'whole school' performance data for '3+ Level 6' .....	32
Fig 2.3: S5 'whole school' performance data for '5+ Level 6' .....	33
Fig 4.1: Average tariff scores of S4 pupils, by Gender, Scotland, 2000/01 to 2004/05 .....	68
Fig 4.2: Pupils in S4 gaining 5+ Awards at SCQF Level 5, by Gender, Scotland, 2000/01 to 2004/05 .....	69
Fig 4.3: Percentage of school leavers with 4+ Highers passes by gender .....	76
Fig 4.4: Trends in highest % levels of attainment of Scottish school leavers by gender: 1965-98 .....	77
Fig 6.1: Interview programme in School A .....	129
Fig 6.2: Interview programme in Schools B and C .....	132
Fig 7.1: Process diagram.....	161
Fig 8.1: Emergent categories .....	164
Fig 8.2: Category: 'Self-awareness of effective learning' – individual boys .....	167
Fig 8.3: Category: 'Self-awareness of barriers to learning' – individual boys .....	168
Fig 8.4 Category: 'Perception of gender identity' – individual boys .....	168
Fig 8.5: Category: 'Self-awareness of effective learning' – boys' focus groups (School A) ..	169
Fig 8.6: Category: 'Self-awareness of barriers to learning' – boys' focus groups (School A) ..	169
Fig 8.7: Category: 'Perception of gender identity' – boys' focus groups (School A) .....	170
Fig 8.8: Category: 'Self-awareness of effective learning' – girls' focus groups (School A) ...	172
Fig 8.9: Category: 'Self-awareness of barriers to learning' – girls' focus groups (School A)	173
Fig 8.10: Category: 'Perception of gender identity' – girls' focus groups (School A) .....	173
Fig 8.11: Category: 'Perceptions of factors influencing boys' learning' – teachers (School A)	174
Fig 8.12: Category: 'Perceptions of factors influencing boys' learning' – parents (School A)	175
Fig 8.13: Category: 'Self-awareness of effective learning' – boys' focus groups (School B)	187
Fig 8.14: Category: 'Self-awareness of barriers to learning' – boys' focus groups (School B)	188
Fig 8.15: Category: 'Perception of gender identity' – boys' focus groups (School B) .....	188
Fig 8.16: Category: 'Self-awareness of effective learning' – girls' focus groups (School B) ..	189
Fig 8.17: Category: 'Self-awareness of barriers to learning' – girls' focus groups (School B)	190
Fig 8.18: Category: 'Perception of gender identity' – girls' focus groups (School B).....	191
Fig 8.19: Category: 'Perceptions of factors influencing boys' learning' - teachers (School B)	191
Fig 8.20: Category: 'Self-awareness of effective learning' – boys' focus groups (School C)	193
Fig 8.21: Category: 'Self-awareness of barriers to learning' – boys' focus groups (School C)	193
Fig 8.22: Category: 'Self-awareness of effective learning' – girls' focus groups (School C) ..	195
Fig 8.23: Category: 'Self-awareness of barriers to learning' – girls' focus groups (School C)	195
Fig 8.24: Category: 'Perception of gender identity' – girls' focus groups (School C).....	196
Fig 8.25: Perceptions of factors influencing boys' learning - teachers (School C) .....	197

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**Author's declaration**

I declare that, except where explicit reference is made to the contribution of others, that this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Signature: 

Printed name: Val Corry

## Chapter 1: The context and the purposes of the study

### 1.1 Chapter overview

This chapter raises the issue of the gendered patterns of attainment found within the academically able cohort of pupils within one secondary school in Scotland (School A). The synopsis of this thesis summarises the trajectory of the research from the identification of a gendered pattern of attainment to the exploration of boys' perceptions of their learning and the generation of a grounded theory. The context of this study, both my professional role as a Head Teacher in School A and the approaches taken to provide opportunities and support for all pupils in the school, are outlined. The purposes of this study conclude the chapter.

### 1.2 Introduction

Gender in education has attracted significant attention over the last 40 years. In the 1970s the issue of girls being disadvantaged was raised as a concern and the focus was on providing the same educational opportunities for girls as for boys, particularly equal access to all areas of the curriculum (Forde, 2008). In the last 20 years, there has been an increasing focus on boys' underachievement (Epstein *et al.*, 1998; Tinklin *et al.*, 2001; Forde, 2008) with attainment statistics showing the difference between boys' and girls' performances, with boys appearing to underperform in national examinations when compared to girls (Scottish Executive, 2006; Scottish Government, 2008a, 2008c, 2013).

This study has contributed to research that is seeking to understand the 'gender gap' in attainment. Other research in this area has tended to focus on **all** boys and not on considering which boys, that is studies have tended to treat boys as a homogeneous group rather than look at the position and progress of specific groups of boys. The focus in this study is on academically able boys. This is an area that appears to be under-researched despite statistical evidence examined at school level and nationally as part of this research showing that this is a cohort where there is a *statistically significant* difference in attainment between able boys and girls. This research has provided findings from three secondary schools in Scotland that point to boys' construction of their gender limiting their success as learners. The use of grounded theory methodology, in this context of seeking to understand the gender gap, has also provided new insight into the effectiveness of gathering and interpreting data in this way. Privileging the voice of the pupil, in this case

the voices of academically able male pupils, and learning from these boys' views of their own learning has added to the body of knowledge and has the potential to support policy makers and teachers in their professional learning about gender and the implications for teachers' practice.

### **1.3 Synopsis of thesis**

The first two chapters describe my journey as a head teacher that led me to this research study and set out the basis of my research. Chapter 1, as outlined above, gives the context for this study and sets out the key purposes of this research. Chapter 2 begins by setting out the research questions. These are followed by an explanation and analysis of the available attainment data from School A, which triggered this study. This shows the phenomenon, as seen in School A, of the significant difference between the attainment of academically able boys and girls, with boys performing less well than girls. The chapter also examines data from other similar schools in order to explore the differences in attainment by gender, with a particular focus on those schools that have been used in this study to consider transferability of the findings from School A. As a result of the findings from the statistical analysis of the attainment data, a small-scale intervention was undertaken in School A, which is summarised briefly in this chapter. The practice and ideas that emerged from the intervention reinforced my conviction to embark on this research study and helped to inform the purposes of this study, which conclude this chapter.

To explore the phenomenon and set the context for the research, a literature review was carried out to understand gender and gender issues in education, the policy context for gender with a specific focus on attainment, and the key studies that had been funded by governments to seek solutions for this issue of boys' underachievement. The literature review in Chapter 3 was not limited to academically able pupils but considered a wide range of literature in this field. Exploring gender theory from a modernist and postmodernist/poststructuralist stance gave deeper insight into the concept of gender, gender identity and gender equity. What became clear was the complexity of this area and particularly gender construction, and how this can influence the lived experiences of learners. Chapter 4 examines the policy related to gender and attainment, both in Scotland and in other areas of the UK, and the expectations on schools and local authorities to respond to this policy. Attainment data was examined to set this phenomenon in a national and international context. The focus was on the academically able cohorts. In response to this phenomenon, governments around the world have funded reviews/studies to try to



make sense of the issue, and to make recommendations to help practitioners. Chapter 5 analyses the key reviews/studies carried out in Scotland, other parts of the UK and in Australia. All the studies used a method of testing a hypothesis and drawing from ‘good practice’. No study used the boys themselves as subjects, to explore their lived experiences as learners or carried out any research that would allow inferences to be made about boys’ perceptions of their identity as learners. What became evident from these specific reviews/studies was that their impact was inconclusive. More importantly in the context of this research study, there was little focus on the academically able groups of boys.

Chapter 6 details the rationale and the methodology adopted to explore boys’ perceptions of their learning. The phenomenological paradigm using a case study approach is explained, and how empirical data from case studies in three schools was gathered. (School A was the main test site with data gathered from boys, girls, teachers and parents to triangulate the findings from the boys’ perceptions of their learning. The case studies in Schools B and C were carried out to consider transferability of the findings from School A). The grounded theory approach used to analyse the data is explained: conceptualisation, categorisation and theory generation. In Chapter 6 the contested nature of the interviewer, particularly in School A where I had ‘insider’ status; and the interviewing of individuals and focus groups, is discussed from a critical stance.

Chapter 7 explains the principles of analysis of the data using the grounded theory method: the coding of the data, identification of patterns, conceptualisation and categorisation grounded in the data, and the emergence of a grounded theory. Chapter 8 presents the findings from the analysis of all the data gathered through interview in all three schools, using conceptual maps as the method of presenting the findings, and concludes with a summary of the findings.

In Chapter 9 the key concepts emerging from the grounded theory analysis are discussed critically in the context of the research literature: both literature on factors that focus on boys’ underachievement, and literature exploring the concept of gender and gender construction. The chapter concludes with the presentation of the grounded theory that is emergent from all the data analysed.

The final chapter, Chapter 10, reviews the purposes of the research, including the grounded theory proposed to explain the findings. A response is made to the research questions underpinning this study. The chapter concludes with some recommendations for policy

makers and practitioners, in terms of gender, to begin to understand and respond to the gender related issues in education related to the phenomenon investigated in this study, and more widely. The potential to employ the type of methodology used in this study in other fields is discussed.

#### **1.4 The concepts of attainment, achievement and ‘underachievement’ in the context of this study**

This study focuses on **attainment**, specifically measures of performance in external examinations. In the literature, both ‘attainment’ and ‘achievement’ are used to denote performance in tests and examinations but to avoid confusion attainment is the term used throughout this thesis. This focus does not diminish the importance of looking at equality from a wider perspective, that of **achievement**. Achievement includes skills and attitudes underpinned by values (Halstead and Taylor, 1996), or the ‘growth mindset’ advocated by Carol Dweck (Dweck, 2007), which is wider than the learning that is tested through examinations. The gaining of these wider attributes is the ambition for *Curriculum for Excellence* (Scottish Government, 2008b): Scotland’s framework for learning.

**Achievement** is an indicator of the success in acquiring this wider range of attributes (Ward *et al.*, 1996; Power *et al.*, 1998; Gems Education, 2010). The specific aspect of **attainment** is an element of this wider field.

This doctoral study focusses on those who are academically able or ‘high attaining’ and specifically on the gendered pattern of attainment amongst the most academically able secondary pupils in the 16 to 18 age range. There is no specific definition given in the literature for what would constitute attaining highly. Tinklin, whose work looks at the high attainment of girls from 1978 to 1994, defines high attaining as gaining “four or more Higher Grade passes at A-C by the time of leaving school” (Tinklin, 2000: 2). Croxford use three or more Highers as their definition for the high attaining group (Croxford *et al.*, 2003: 136). ‘High attaining’ for the purposes of this study are those who have, or potentially could achieve five or more qualifications in S4<sup>1</sup> at SCQF level 5<sup>2</sup> in S4, and

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<sup>1</sup> S4: Fourth year of secondary school and the first year where all of the pupils take external examinations in all the subjects studied in school. These examinations are set by the SQA (Scottish Qualifications Authority) (SQA, online a).

<sup>2</sup> The examinations in S4 at the time of this study were available at three levels SCQF levels 3, 4 and 5, with 5 being the highest and most demanding level (SQA, online b). On a rare occasion a very able pupil might attempt level 6 (Higher).

three or more Highers<sup>3</sup> in S5<sup>4</sup>, with a focus on five or more Highers in S5.

‘**Underachievement**’ in this doctoral study is not ‘low’ achievement but is used as a term to describe where performance has not reached the expected level, predicated by perceived potential (Smith, 2003). In considering ‘able’ boys, they are still performing well compared to others, both boys and girls, but they are not doing as well as expected.

## 1.5 Professional context

Underachievement of boys is a reality for many head teachers in Scotland, and was for me as a secondary head teacher. The gendered pattern of attainment amongst the academically able group was evident as I examined the performances in national examinations at the end of each school year from the time of my taking up post in 2002. The school I led, School A, is a rural school of medium size relative to other Scottish secondary schools, with a roll in the region of 900. The school had a low FME<sup>5</sup> indicator of approximately 4% during the lifetime of this study. There would therefore be an expectation of high attainment based on national statistics. In 2002, the school’s overall performance was in the top 10% of Scottish schools.

As a head teacher, my duty was to maximise achievement and attainment in order to provide all pupils with the best opportunity to be successful in their lives. I was accountable for the provision of a service to pupils that would maximise this success including pupils’ performance, both in the early years of their school careers and in the external examinations that are used for entrance to training, the work place, and further and higher education. This accountability for pupils’ performance is enshrined in the *Standard in Scotland’s Schools etc. Act 2000* (Scottish Parliament, 2000a) and was an expectation of Her Majesty’s Inspectorate of Education (HMIE) in Scotland as referenced in their publication *How Good Is Our School?* (SEED, 2002). It has continued to be so in updates

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<sup>3</sup> The most demanding level of examination in S5 and used for university entrance. On a rare occasion a very able pupil might attempt level 7 (Advanced Higher).

<sup>4</sup> S5: Fifth year of secondary school with all pupils sitting external examinations at the end of the year for all their subjects studied in school.

<sup>5</sup> FME – Free meal entitlement was a measure used to give an indication of the level of disadvantage in schools. This school level indicator is based on the number of pupils registered for a free meal in that school. This data has been available in local authorities since 1982/1983. This deprivation indicator is used in schools to benchmark performance. In Scotland, there is a correlation between deprivation and attainment with those living with deprivation having lower attainment than those who are not (Scottish Government, online d).

of *How Good Is Our School?* (Education Scotland, 2015). (The *How Good Is Our School?* resource has been intended to support schools on their improvement journey through the provision of a framework for self-evaluation).

Statistical data for the examination results for each school were available to schools from 1991, which allowed head teachers to use the data to look at the attainment trends and consider how to make changes to bring about improvement in the performances in these external examinations. The data was also an important source for local education authorities as they fulfilled their duty of accountability in challenging and supporting schools to improve performance. Local authorities are also required to report annually to Scottish Government on improvement planning: how schools in their authority aim to improve, including raising attainment. The statistical data provided by the Government was STACS (Statistical Tables and Charts) (Cowie *et al.*, 2007), which are explained in more detail in Chapter 2. The tables also included information about performance by gender, which gave schools the opportunity to identify any differences by gender.

With this gendered pattern of attainment in evidence there was a need to begin to examine strategies to try to reverse this trend. This led me, through a self-evaluation process, to examine the support and learning experiences that were being provided and to begin to explore ways of improving outcomes for all learners.

### **1.5.1 School Improvement**

The following sections give a summary of the changes introduced in the school from 2002 to bring about improvement to provide better support and opportunities for all pupils. This gives a context for the school from 2002 to 2012, the years for which the statistical data is used, and sets the scene for the research study.

#### **1.5.1.1 Rationale and vision of a new management structure**

For the *Teaching Profession for the 21<sup>st</sup> Century Agreement* (Scottish Executive, 2001), the Scottish Executive had worked in partnership with representatives of teachers' employers (local authorities) and teachers' representatives to agree a range of reforms that would provide professional conditions of service for teachers which would support them in the delivery of the "shared objective of a world class education service which will fit our children well for the 21<sup>st</sup> century" (p. 1). This was a major policy development for the

teaching profession in Scotland which included reforms to: the career structure of teachers; teachers' duties, including the duty to give advice and guidance to pupils about their learning; principal teachers being involved in pastoral care as well as the curriculum; and professional learning being an entitlement and a requirement for teachers.

In the autumn of 2002, the local authority for School A resolved to take advantage of these reforms by working with schools to restructure the management of all secondary schools in the local authority. This mandate from the local authority allowed me, with the support of the rest of the senior management team (the three depute head teachers), to explore and develop a structure that would provide the strongest focus on the learning and success of every child. The restructuring was underpinned by a vision of having the 'child' at the heart of the change to the structure: meeting the needs of every pupil through successful learning provided by effective teaching and through an effective individualised support service for pupils. This vision was predicated on developing and maintaining strong interpersonal and professional relationships amongst staff. 'Relationships' was made a core value of the school with the aim of this being embraced by all in the school community. Building a strong positive ethos was fundamental. To realise the vision demanded the development of staff to become critically reflective and accomplished teachers, working together in a climate of collegiality, to provide a richer learning environment and a support service for pupils that would maximise outcomes for all learners, all underpinned and supported by robust self-evaluation. This fitted with the principles outlined in *Teaching Profession for the 21<sup>st</sup> Century Agreement* (Scottish Executive, 2001).

#### **1.5.1.2 Pupil support service**

The *Teaching Profession for the 21<sup>st</sup> Century Agreement* signalled a change to the role and responsibilities of teachers, moving away from curriculum delivery as being the sole function, to being responsible for assessing and supporting individual pupils' learning and progress. This included working with a child's parents and other professionals. Raising achievement was also stated as one of the key duties of teachers. Taking advantage of these roles and responsibilities detailed in the report, the new support service within School A was designed to ensure that every pupil was known well by an assigned teacher, both from a learning and a pastoral perspective, and the pupil was provided with advice and support as required.

This new support service was phased in with one year group at the beginning of session 2003/2004 and was fully phased in and implemented by session 2007/2008. The fundamental aspect of this new service was that pupils were assigned to a teacher (Form Class Leader) who only had a small number of pupils (no more than twenty) to support. The aim was that this teacher would ideally stay with the group throughout the group's school career. Other aspects of note are that the form class leader would meet with his/her group daily as well as being the group's subject teacher and teacher of personal and social education in their first and second year in secondary school. This would allow the teacher to build strong relationships with the pupils in the group. The teacher would also track and monitor the progress and successes as well as the needs of each pupil. Working closely with a child's parents was also one of the important roles of the form class leader, providing early and informed information about their child's learning but also working with the parent where there were needs to be addressed. The expectation was that this new system of support would improve outcomes, including attainment, through early identification of need and timeous intervention.

From session 2004/2005, Principal Teachers also had a key role in the service (see below), providing back up support for Form Class Leaders and moving a pupil to their 'case load' if the needs of the pupil demanded it to ensure that the pupil was receiving the correct and best intervention for their identified needs. Depute Head Teachers had overall responsibility for the effective running of the service and occasionally worked directly with pupils by way of support.

#### **1.5.1.3 Outline of the management structure**

Following the introduction of the support service in 2004, the new management structure was introduced. Teachers were grouped in learning and teaching teams led by a principal teacher. Previously, teachers had been grouped by subject into 'departments' led by a principal teacher, whose primary duty was to deliver the curriculum of that subject, and managing the staff in that department. This new middle leadership role was more wide-ranging. The key responsibilities of the principal teacher leading the learning and teaching team were: learning and teaching; line management of approximately eight classroom teachers and development of their professional learning; coordinating curriculum development (but the lead on curriculum development was the province of the subject teachers themselves) and overall pastoral care of about one hundred pupils. This pastoral care responsibility included supporting the five/six Form Class Leaders, in their

learning and teaching team, and taking up the case of a pupil when additional support was identified beyond the support given by the Form Class Leader. The principal teacher also had an important quality assurance role covering all aspects of their responsibilities. There were other principal teachers who had a more intensive role in supporting pupils with greater pastoral and learning needs.

School improvement became inclusive, with Principal Teachers having lead responsibilities in whole school improvement, and all teachers being involved in an area of the school improvement agenda. Pupils' views were also important in addressing improvement in the school. Parents had a voice through the School Board (and more recently the Parent Council) as well as being part of specific focus groups and responding through questionnaires.

This new structure had pedagogy as the focus rather than curriculum content, and supported the professionalising of the teaching workforce to be leaders of learning.

#### **1.5.1.4 Focus on learning and teaching**

As Head Teacher, it was one of my key responsibilities to improve pupils' learning experiences as well as the outcomes. I believed that developing learning and teaching methodology that was active and relevant, but also challenging, with a focus on learning rather than teaching, would have a strong influence on engaging pupils positively in their learning and have an impact on achievement. Cooperative learning (Pederson and Digby, 2014), assessment principles (Black and Wiliam, 2006), information technology to enhance learning, a focus on numeracy, literacy and health and wellbeing were all key priorities for school improvement and this relentless focus began to see a shift in pedagogy. Learning was not just confined to subject teaching but extended to a wide range of activities and opportunities for pupils to engage in outwith classroom time to further develop relationships, citizenship, responsibility, confidence and to simply enjoy working and being with others.

#### **1.5.1.5 Professional learning**

From 2002, there was a strong focus on developing professionalism and collegiality. The context for professional learning was improving learning experiences and meeting learners' needs. The learning and teaching focus was developed through collaborative

working amongst staff across subject disciplines. This was facilitated by teachers being in learning and teaching teams and in school improvement teams, with several unpromoted staff taking lead roles. Encouraging and supporting teachers to become involved in professional discourse and action research, through school-based and university-based events and programmes, began to see the development of teachers who recognised their responsibilities as learners and leaders of learning.

#### **1.5.1.6 Self-evaluation**

From 2002 to 2012, during my tenure as Head Teacher, self-evaluation had a high profile with the rationale always to focus self-evaluation on improving outcomes for pupils. Initially, this involved all Senior Leaders (the head teacher and the depute head teachers) and Principal Teachers visiting teachers' classes to evaluate learning, both experiences for learners and how their needs were being met. This involved the class teachers critically reflecting on practice through engaging in professional dialogue with the 'observer', with the focus on learning and meeting learners' needs.

In 2010, a new way of working, based on the Learning Rounds<sup>6</sup> model, evolved. This saw every teacher being part of a group of three teachers who visited each other's classrooms on a nonjudgmental basis examining a whole school theme of learning, teaching and assessment. The group met to discuss findings. The whole staff then met in groups, to discuss strengths and further improvements and a possible future theme for the next round of visits. This self-evaluation proved to be very powerful. Teachers have the opportunity to have professional dialogue with other colleagues with outcomes for pupils as the focus.

In addition to the pupils having conversations with their teachers about their own learning, the views of pupils were sought each year on what they believed were the school's strengths and suggested changes to improve learning to inform improvement planning. Some pupils were also involved in class visits and discussion with staff as part of learning rounds model of self-evaluation.

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<sup>6</sup> Learning Rounds is a way for professionals to learn from and with each other (Philpott and Oates, 2015). Originating in the medical field, the work of Richard Elmore (Elmore, 2007) on 'instructional rounds' has inspired learning rounds in the Scottish educational context. Elmore believes that this model fosters teachers as "coproducers and learning partners" (Roberts, 2012: x).



### **1.5.1.7 Strategies to improve attainment**

Taking advantage of the new support structure, with the early identification of need and targeted support being possible for all who needed it, pupils who had the potential to achieve highly but who were judged to be underachieving were identified. This was not specifically focused on boys initially. It was decided, as a first step, to focus on mentoring pupils in S4 working at SCQF level 5, for almost all in S4 the highest and most challenging level of examinations undertaken at the end of S4. There were two reasons for this decision. Firstly, the difference between the boys' and girls' performance at this level was significant, and as a head teacher this raised questions for me. Secondly, the rationale was that supporting pupils in S4 would impact positively on their performance and confidence to achieve both in S4, and in subsequent years.<sup>7</sup>

In 2004, as a first step to try to identify where support would be best placed, all the data on performance for every pupil at the beginning of S4 was collected. This was based on teachers' judgments backed up by assessment evidence. This data was analysed and those pupils who were predicted to be successful in some subjects at SCQF level 5 but who were in danger of not achieving at least five subjects at this level, were mentored by the depute head teachers. The results at the end of the year improved. As the new pastoral care system was phased in, this way of collating and identifying underachievement for S4 was expanded to include the data for S5. This data was used by subject teachers to provide support for pupils in their subject and by Form Class Leaders and their principal teacher, with their overall responsibility for support, to mentor and support pupils in their pastoral care groups. Depute Head Teachers had an overview and carried out a quality assurance role.

### **1.5.1.8 Impact of mentoring and support on attainment**

By 2008, the overall attainment in external examinations had improved with the most significant increase seen in the performance data for external examinations in S5. The overall performance of the most academically able pupils in S5 increased significantly relative to 2007 and this improvement in attainment was sustained in subsequent years. (It is worth noting that the S5 group in 2008 were the first cohort to go through the school

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<sup>7</sup> Generally, it is recommended that learners have a pass at SCQF level 5 in S4 to progress to studying Higher in S5 – the level used for university entrance. Achieving less than SCQF level 5 in S4 would mean that in most cases a pupil would not progress to studying Higher in S5.

supported by the pupil support service introduced in 2003). However, this significant improvement in overall attainment in S5 did not have an impact on the gender gap in attainment.

Over the preceding six years, 2002 to 2008, much had been accomplished in realising the vision set out in 1.5.1.1. In particular the support in the school was personalised, with ongoing monitoring, mentoring and intervention where required; and meeting learners' needs was the highest priority for teachers who saw themselves as part of a professional learning community.

Tinklin *et al.* (2001), commissioned by the Scottish Executive, had carried out research to seek information on the reasons for the attainment gap and as a result suggested strategies for use in Scottish schools to address the gap. The authors did identify the complexity of this subject. Many of the recommendations made by Tinklin *et al.* had been implemented in the school and appeared to be working well, through pastoral support, active learning, assessment for learning, literacy, and 'pupil voice'. Pupils considered equal opportunities from the perspective of gender within their personal and social education programme. The Ofsted Report *HMI 1659* (Ofsted, 2003), reporting in England, added, in line with the findings of Tinklin *et al.*, that although the strategies recommended were to address underachievement of boys, they were just elements of good learning and teaching practice within a positive learning climate. This was my rationale in 2002. However, despite the changes made, resulting in an overall improvement in attainment, this had not made the expected difference to the 'gap' in attainment between some academically able boys and girls. It must be stressed that it was not all boys who underachieved, not even the majority, but those boys who were not achieving as well as might be expected deserved to have this investigated.

#### **1.5.1.9 Intervention in 2010 to improve support for some boys**

In response to the continued seeming underachievement of some boys and in line with the ongoing improvement in mentoring and support, a small-scale intervention was tried. This intervention was informed by some of the research in this area (Tinklin *et al.*, 2001; Younger and Warrington, 2005; Condie *et al.*, 2006; Estyn, 2008; Forde, 2008). Groups of boys in S3, S4 and S5 in the 'academically able' category who, from attainment data and teachers' judgment, appeared to be underachieving were interviewed: 17 boys in total.

(Some boys and some girls who were not considered to be underachieving were also interviewed to compare and contrast the findings). The aim was to try to find out what support the boys felt they needed, and the learning and teaching strategies that could have an impact. The groups of boys in question were interviewed by small groups of teachers and thereafter their progress was tracked as part of the pupil support service. The notable points made by the boys generally were their desire for an environment that was providing good learning opportunities, with the relevance of learning explained, and what appeared to them to be a barrier was their general lack of ambition and drive. There did appear to be gender differences in approaches to study and ambition when comparing the boys' and girls' responses. The groups' views were not always in accord and it was felt by the teachers that the outcomes of the discussion groups were inconclusive. Some of the points raised by the literature and the points raised by the boys were shared with staff to promote awareness and to try to address the needs of the boys. Modern Languages and English tried single sex teaching.

There appeared to be some success arising from the intervention based on the ongoing learning conversations with the boys, the tracking by teachers, and the attainment data at the end of the session 2010/2011. This led to the belief that the intervention had an impact by heightening awareness amongst staff, improving learning and teaching strategies to be more inclusive for boys, and providing support that was more focussed on addressing the gender issues. However, the SQA results of 2012 once again showed a wide gap between attainment of boys and girls.

These types of interventions are what schools do to try to identify issues and bring about improvement. I was aware that to improve the practice and potential outcomes consideration should be given to 'good' research practice. In this case an attempt was made to make the questions open ended, for example, "In which three classes do you learn best? Why?" However, each group was interviewed by different teachers, compromising validity and reliability and it was difficult to be certain how the interviews were conducted in terms of the interviewer leading the discussion, although the brief was to 'have a discussion'. The analysis of the empirical data collected was not done systematically but was by 'reading through' rather than using any qualitative analysis method.

## 1.6 Purposes of this research study

The statistical data and the small-scale intervention triggered this research study with the focus on academically able boys and perceptions of their learning. The academic literature and research examined as part of this pilot tended to focus on all boys and all girls, or with a focus on the disadvantaged or disengaged group of boys. There also appeared to be little consideration of gender as a construct or interplay of gender and learning in considering underachievement of boys. A range of factors that could have an influence was cited but there appeared to be no evidence of sustainability in improvement from the literature examined. This led to my decision to look in depth at this phenomenon, focusing on the academically able grouping, not only because it appeared to be an issue in this one school but was seen in statistics in many other schools in Scotland (discussed in Chapters 2 and 4).

The intervention in the school in 2010 had used the views of the boys themselves to try to identify specific support. This was not a common methodology in the studies examined. I therefore decided to use a methodology that sought systematically the views of boys to look at this phenomenon from their perspective, exploring not what they believed were factors that impacted on their attainment, but to find out their views on their learning: looking not from an *a priori* theoretical position but from a position that made no assumptions about what could be the reason for this phenomenon.

The purposes of the research study that underpinned this study are listed below.

- To review critically the literature from a Scottish, UK and international perspective, related to gender and gender construction specifically in education.
- To appraise critically current policy in Scotland on gender in education, and to examine how this, and associated support, offer insight and practices to support schools, particularly to improve performance.
- To appraise critically key studies on gender and attainment previously carried out from the field of research and consider how these support thinking and practice in the area of gender and attainment.
- To identify and use research methods that privilege the authentic voices of boys.
- To examine academically able advantaged boys' perceptions of their learning and their identity as a learner.

- To examine the perceptions of others (girls, teachers, parents) in relation to learning and gender.
- To generate conceptual maps of academically able advantaged boys' perceptions of their learning.
- To explore critically the application of the findings to policy and practice related to gender in schools and make recommendations for further development to effect change in the education system specifically about gender.
- To make recommendations based on the findings to effect change and improvement in the education system more generally.

The next chapter poses research questions and begins to seek answers to the first question by analysing and discussing the data, and patterns of attainment that emerged, for School A as well as exploring the attainment by gender in schools similar to School A.

## Chapter 2: The research questions and the statistical background

### 2.1 Chapter overview

This chapter begins with the research questions underpinning this study and goes on to discuss evidence in response to the first question posed about attainment in external examinations of boys compared to girls in School A. Examination statistics are presented and explained to show the gendered pattern of attainment and the trend that was evident from 1999 to 2012. Other statistics are presented and discussed to illustrate that the pattern was not confined to School A.

### 2.2 Introduction

From 1999 to 2013 nationally generated examination statistics, in the form of STACS, were made available to schools and local authorities annually<sup>8</sup> from the Scottish Government's Education Analytical Services Division, ScotXed (Scottish Exchange of Educational Data) (Scottish Government, online a). This was the main source of data of this type available to secondary schools. STACS data was wide-ranging and detailed. The data was aggregated at school and subject level. There were also comparisons made between schools nationally.

The other information useful to this study was the grouping of schools in Scotland. These schools were grouped based on a principal components analysis (PCA)<sup>9</sup> in an attempt to put schools into groups that were closest in demographics, and by 2008 there was a starring system introduced to give a 'closeness' in statistical terms (ScotXed, online a). This allowed the examination data for schools in the comparator group closest in demographics to School A to be examined. There are some who have questioned this way

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<sup>8</sup> The data provided is now 'Insight' (from 2014) and is not in the same format as STACS. Each school's data is made available to that school and their local authority. There is not the same access to other schools' data. Instead comparisons are made to a 'virtual' school to provide a relative performance indicator (Scottish Government, online b). Insight now provides attainment data by SIMD (Scottish Index of Multiple Deprivation) to give a break down for schools of how pupils perform by level of deprivation assigned due to where they live (Scottish Government, online e).

<sup>9</sup> PCA includes local area measures of the percentage of women with degrees and households where the main householder has never worked, together with the percentage of pupils entitled to free meals, living in the 15% most deprived data zones, those who have additional support needs (ASN) or live in urban areas (Cowie *et al.*, 2007: 46).

of grouping schools (Croxford and Cowie, 2008), but, used judiciously as in this study, comparator schools have been useful.

Croxford and Cowie (2008) raised limitations of STACS in that there was no pupil-level data, nor was there the facility to track a pupil's progress. Although not providing this level of detail, the data did give schools and local authorities a means to self-evaluate to identify where performance was strong, where performance would suggest areas for improvement, and any trends over time. Because of the lack of pupil-level data STACS did not provide the full picture. Teachers were able to provide this level of assessment data to supplement the STACS data.

The data pertinent to this study is the whole school performance by year group.<sup>10</sup> This data had been examined annually from 1999 and there continued to be differences in attainment by gender. The use of this STACS data was the background to this research and triggered this research enquiry, and was also used as additional information for the case studies.

### **2.3 Research questions**

To begin to explore this gendered pattern and the reasons to explain the difference in attainment between the boys and girls who had the potential to perform at the highest level in external examinations, a number of research questions were posed and are listed below. Each of the high level questions has a subset (a., b., and so on) that helped to operationalise the research enquiry.

*Research questions:*

1. How do boys perform compared to girls in assessments, notably external examinations administered by the SQA?
  - a. Are there gender differences in attainment in SQA examinations?
  - b. Are there identifiable patterns of gender differences across all levels of attainment?
2. What are the perceptions of academically able advantaged boys of their learning, including learning experiences that help learning and learning experiences that

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<sup>10</sup> STACS data can provide a deeper analysis – gendered patterns by subject for example but these are not a subject of enquiry of this study.

hinder learning?

- a. How do academically able advantaged boys describe their learning?
  - b. What do academically able advantaged boys see as facilitating their learning?
  - c. What do academically able advantaged boys see as hindering their learning?
3. What part, if any, does gender and gender construction play in influencing an academically able advantaged boy's learner identity?
- a. What views, if any, do boys express about their learner identity?
4. What are the perceptions of learning from the perspective of girls, teachers and parents and how do these compare with the perceptions of academically able advantaged boys?
- a. What are the perceptions of learning from the perspective of girls, teachers and parents in School A?
  - b. What are the perceptions of learning from the perspective of girls and teachers in School B?
  - c. What are the perceptions of learning from the perspective of girls and teachers in School C?
  - d. What are the similarities and differences between the perceptions of boys and the perceptions of the other sub-samples?

## **2.4 Explanation of the statistics presented**

Before beginning to respond to question 1, a brief explanation and overview is given of the data that was scrutinised, with an explanation of the tables provided in Appendices 1 to 4.

The STACS data gave an analysis of the performance in the examinations set by the SQA. These examinations are available at a number of levels.<sup>11</sup> Pupils take their first diet of

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<sup>11</sup> The examinations provided were to assess performance at different levels based on a universal framework: SCQF (Scottish Credit Qualifications Framework) (SCQF, online a). At the time of this study pupils in S4, in School A and in most other schools, would sit examinations at levels 3, 4, or 5, depending on their progress in a subject, with level 5 being the most demanding. (Almost all pupils in S4 would be presented for eight subjects). The following year, in S5, those who were coping with the most demanding work would be presented at level 6 (Higher) in their subjects of choice, progressing from level 5 in S4. (Almost all pupils in S5 would be presented for five subjects). Others who needed a slower pace of working and who had achieved at level 4 in S4 would generally be presented for a level 5 examination. In S6, there tends to be more variation in a pupil's choice of subjects and levels. Those who had been successful at level 6 in a subject might proceed to level 7 (Advanced Higher) but generally this was a small number relative to those studying Higher in S5. Others might choose to study another Higher. Pupils in S6 tended to study between three and four subjects. The diagram on the SCQF website shows the progression through the levels (SCQF, online b).



examinations in S4.<sup>12</sup> The ‘whole school’ STACS data was the focus of scrutiny. This data gave the overall pupils’ performance, both as a whole and by gender, as a year group for the three year groups S4, S5 and S6, in these external examinations. The percentage attainment was given as a percentage of the S4 roll and this same S4 roll figure was also used for S5 and S6 even though some of the pupils left school at the end of S4 and a further group left at the end of S5. In the case of the performance by gender, the attainment for ‘males’ and ‘females’ was given as a percentage of the number of boys and girls respectively as a percentage of the S4 roll.

The whole school data also provided a national comparator: how each school performed in the various measures relative to schools nationally. This allowed a school to compare their performance against other schools and to compare the performance on a year-by-year basis. The ‘measure’ for this relative performance was the National Comparison Decile (NCD). For example, if the performance put the school in the top 10% of schools in Scotland it would be assigned NCD ‘1’; if in the top 20% of schools NCD ‘2’ and so on. The tables in Appendices 1 to 4 include the NCDs. It is important to point out that any trends for a year group with time are not based on the same cohort of pupils and so conclusions must be treated with caution, but it does give some indication of improvement or otherwise and trends that could be linked to school practice, for example changes to learning and teaching. Progression could be ‘measured’ by comparing the performance data for S5 with the data for S4 for the same year group. This gave information about how pupils had progressed.<sup>13</sup> Although data could be interrogated to determine strengths and development needs either from a whole school perspective or at subject level, it did not give comparative data on pupils’ individual performance.

## **2.5 Gendered patterns of attainment from the statistics**

This section presents and discusses the statistics for School A provided by STACS for the years 1999 to 2012.

### ***In the beginning as Head Teacher – 1999 to 2002***

Appendix 1 gives an extract from the data that I examined at the end of my first year as Head Teacher as part of my accountability role for performance. I had access to the

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<sup>12</sup> There were some exceptions during the period under study with some pupils sitting English in S3. This data was carried over and was included in the analysis of the performance by the end of S4.

<sup>13</sup> Subject data provided by STACS included a measure of progression but this has not explored here as it is not pertinent to the research questions posed.

STACS data for the four years up to and including 2002 when I took up post. As a new head teacher finding out about the school, I had previously been aware of a gender difference in performance at whole school level between some boys and some girls through scrutiny of the data for the three years before my arrival in the school. The data used to compare boys' and girls' performance was the whole school attainment for those in S4 and S5. (S6 was not used because of the fewer number of subjects studied and the number of pupils who left at the end of S5). Examining the data for S4 and S5 allowed me to begin to identify difference in performance by gender that appeared to be pronounced, and to identify trends over the four years. There was an exception to the trend in the S5 data, where in 2001 there was little difference in attainment by gender, Girls' attainment had dropped, whereas boys' overall performance that year remained similar to other years.

The performance data in Appendix 1 shows the overall performance for S4 and the performance by gender as supplied in the form of STACS, and some analysis of the data. The analysis of this data, to show the variation in performance by gender at the different levels, is given below in Table 2.1. In S4, the boys in the category of '% S4 roll achieving 5 or more at level 5 or better' shown as '5+ Level 5' shows the greatest difference in performance by gender, with the largest difference being in 2002. The differences at '5+ Level 3' and '5+ Level 4' are small with at most 2% points of a difference.

**Table 2.1: S4: Differences in % between males and females**

	5+ Level 3	5+ Level 4	5+ Level 5
2002	-2	1	<b>22</b>
2001	-1	1	<b>15</b>
2000	0	2	<b>7</b>
1999	0	0	<b>7</b>

(Note if females outperform males number is +)

As an illustration of the magnitude of this difference by gender at level 5, the most demanding level, the statistics for 2002 are examined. 69% of girls achieved 5 passes or more at level 5 or better by the end of S4 compared to 47% of boys: a difference of 22 percentage points. This equates to ■ boys out of a total of ■ boys in that year group achieving 5 passes at level 5 or better. If the boys had achieved at least as well as the girls that year, in this level 5 category, this would have improved the attainment of an additional ■ boys from the ■ boys who did not achieve, equal to 42% of this cohort of boys who did not achieve this level of performance. This lower performance of boys could limit the progression of some of these boys as they moved into S5. Not achieving level 5 in S4

could mean that they would be unlikely to be studying at level 6 (Higher level) in that subject in S5. They could progress to Higher level in S6, but overall this lower performance at S4 could reduce options for transition to higher education in future years.

To confirm the apparent significance of the differences in attainment by gender, t-tests were carried out for the different measures ('5+ Level 3', '5+ Level 4' and so on) for 1999 to 2002, and other years discussed in this chapter. The computation of t-tests for 1999 to 2002 is given in Appendix 6. From the calculations, for the attainment in 1999 to 2002, there is no significant difference at '5+ Level 3' and '5+ Level 4' but there is a significant difference between boys' and girls' attainment in S4 in '5+ Level 5' equating to the pupils attaining at the highest level in S4.

The data for S5 is also given in Appendix 1. The 2002 data for S5 shows variation in the performance by gender with once again this being noteworthy at the most demanding level, level 6 (Higher), as shown below in Table 2.2. Considering the difference shown for the '1+ Level 6', and particularly '3+ Level 6' and '5+ Level 6', which are measures associated with the performance of the most able pupils (Croxford *et al.*, 2003), the gender differences in performance continued to be significant. For example, in 2002 19% of boys achieved five or more Highers compared to 27% of girls: an 8% percentage points difference and the computation in Appendix 6 confirms the statistical significance.

**Table 2.2: S5: Differences in % between males and females**

	<b>5+ Level 3</b>	<b>5+ Level 4</b>	<b>5+ Level 5</b>	<b>1+ Level 6</b>	<b>3+ Level 6</b>	<b>5+ Level 6</b>
2002	-3	-2	17	5	<b>11</b>	<b>8</b>
2001	0	2	7	10	<b>13</b>	<b>1</b>
2000	0	0	3	1	<b>14</b>	<b>7</b>
1999	0	3	20	14	<b>14</b>	<b>11</b>

(Note if females outperform males number is +)

As mentioned earlier, considering the trend using data for a given year group for a number of years is not comparing the same cohort of pupils. Considering the progression of a group moving from S4 to S5 is possible using the data in the tables. An example is shown in Appendix 2 for the comparative data for S4 (2002) and S5 (2003). Comparison of the '5+ Level 5' figure for the '2002' S4 cohort with the level 6 measures for S5 in 2003 continues to show a difference between some boys' and some girls' performance. Another observation is that for pupils who may not have been successful in S4 in achieving at least

five awards at level 5, but who had achieved this in S5, continued to show a similar differential by gender as this same measure for the '2002' S4 cohort. This suggests that the boys did not make up the difference as they progressed through S5.

## **2008**

As part of the self-evaluation exercise for the school, this whole school data was examined annually and, together with the subject data, were the focus of discussions with the principal teachers and teachers in the school both to raise the profile of any areas of strengths and to determine if this was the result of changes that had been made, and also to identify key priorities as part of the school improvement planning process.

By 2008 the overall attainment for all candidates had improved with the largest increase in S5 (Appendix 3). The '5+ Level 6' measure had increased from 19% to 29%. This increase was due to the increase in performance of the girls from 20% in 2007 to 37% in 2008 (Appendix 4 shows a breakdown by gender for S4 and S5 from 1999 to 2012). There was little difference in how the boys performed overall in 2008, but there were some increases in their attainment in later years. This increase in performance of the girls was sustained in subsequent years and hence the whole school attainment remained at this higher level. The t-tests for 2008 to 2012 showed that the gender difference in attainment remained significant despite the increase in boys' attainment. It is worth noting that S5 in 2008 was the first cohort through the school supported by the pastoral care system introduced in 2003. This may have had an impact. However, there was no similar improvement seen in the S4 cohort (Appendix 4). Despite a focus on improvement to better meet learners' needs and the self-evaluation processes in the school, no explanation was found for the S4 attainment not increasing.

## **2010**

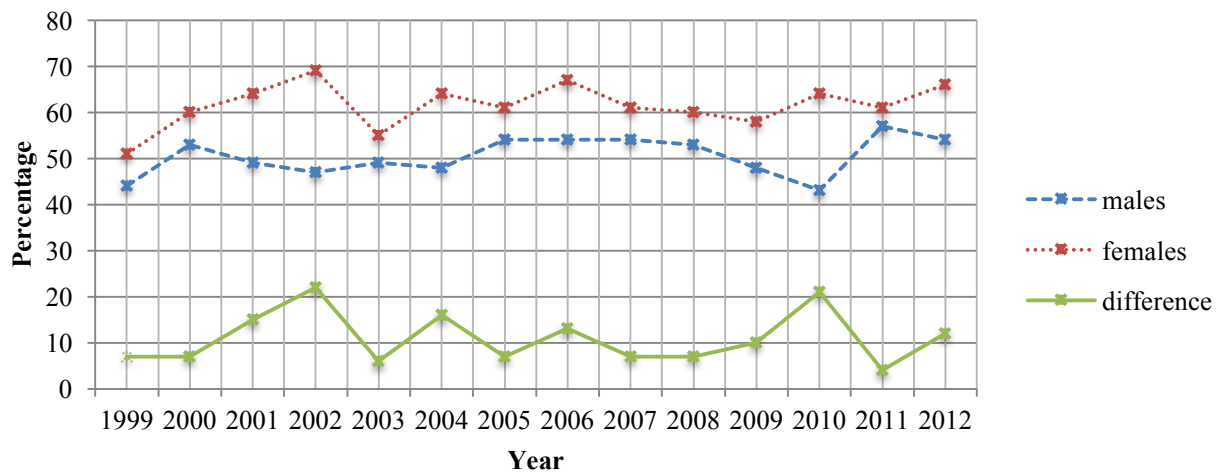
In 2010, the intervention outlined in Chapter 1 was instigated and there was an improvement in some S4 boys' attainment in the examination diet of 2011. This may have been due to the intervention or could have been a statistical variation. The S4 data for 2012 again showed a gender difference that followed the pattern of previous years suggesting that the intervention had not had longer-term impact. The improvement in some boys' performance in S4 in 2011 could have been one reason for the increased attainment in 2012 in S5 (the same cohort of pupils). The boys' attainment at '5+ Level 6' increased to 29% (the highest performance in the 14 years reviewed) compared to girls'

performance of 36% that year. However, despite this increase in boys' performance, this difference by gender was still significant.

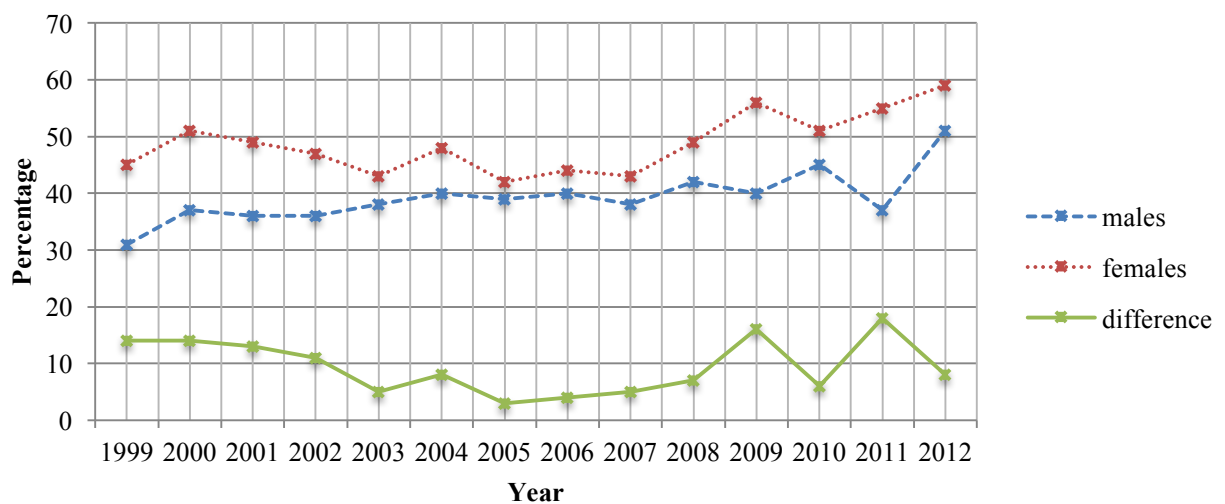
### ***Trends in gendered performance from 1999 to 2012***

Inspecting the data for S4 and S5 for 1999 to 2012, given in Appendix 4 and shown below in Figs 2.1 to 2.3, shows that there was a continuing gender gap in attainment in the more demanding levels mentioned earlier in this chapter.

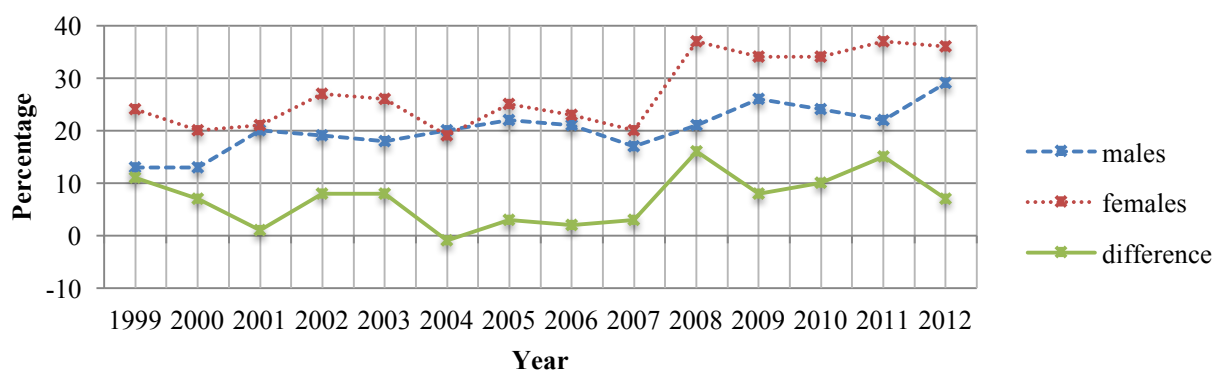
**Fig 2.1: S4 'whole school' performance data for '5+ Level 5'**



**Fig 2.2: S5 'whole school' performance data for '3+ Level 6'**



**Fig 2.3: S5 'whole school' performance data for '5+ Level 6'**



### ***Comparisons with the national picture***

As Head Teacher, the STACS data also provided an opportunity to see how the school was performing at a national level. The NCD figures gave some indication of this relative performance. One interesting point highlighted in Appendix 4, comparing the NCD figures for S4 for 2011 at '5+ Level 5' for 'males' and 'females', the boys' performance was 57% with an NCD 1 and the girls' performance was 61% but with a lower NCD of 2. The conclusion is that nationally boys did not attain as highly in this measure. This also suggests that this lower attainment of boys in the school was in line with the national pattern. (The national statistics compare boys' performance with other boys across Scotland.)

To explore this national picture further, the intervention in 2010 included a preliminary examination of some other schools' statistical analysis of their SQA examination results (Appendix 5). Schools with similar demographics were selected, some in the comparator group of schools and others from an analysis of schools performing at a similar level to School A. The STACS data was used to identify these schools. Appendix 5 presents the data for the measures '5+ Level 5' for S4, and '3+ Level 6', and '5+ Level 6' for S5 for 2010. This analysis confirmed that this gendered pattern of attainment was not solely an issue within School A. In some schools there was little or no difference between boys' and girls' attainment, in others boys performed better than girls overall, but the pattern for the schools' data presented in Appendix 5, was for boys to perform less well than the girls at these more demanding levels.

## **2.6 Concluding remarks**

In summary and in seeking to respond to the first research question posed, from the data analysed for School A, boys overall do not perform as well compared to girls in SQA examinations. This is not to suggest that this is all boys but that some boys could be underperforming. There appears to be a gendered pattern of attainment. However, this gender gap in attainment was not apparent for all the measures representing all levels of examinations. There appeared to be little or no difference in attainment by gender at the '5+ Level 3' or '5+ Level 4'. This is not to suggest that boys are not underachieving at these levels but this was not apparent from the statistics. The difference in attainment appears to be statistically significant for S4 results for the measures '5+ Level 5'; and for S5 results for the measures '5+ Level 5', '1+ Level 6', '3+ Level 6', and '5+ Level 6'. There are some variations in some years but it would appear that there is a greater difference amongst those boys and girls who are sitting the most challenging diet of examinations: those in S4 sitting at least five subjects at level 5 and those in S5 sitting five or more at level 6 (Higher). This would appear to be those pupils who are potentially the most academically able.

To begin to understand this phenomenon of this gendered pattern of attainment amongst what appeared to be the academically able group of boys, the literature review in the next three chapters explored the concept of gender and gender issues in education (Chapter 3), gender in policy terms, and more specifically attainment, which included a review of the national trends in attainment by gender (Chapter 4), and in Chapter 5 some key reviews/studies that had been instigated by governments to try to ameliorate the gender gap.

## **Chapter 3: The concept of gender in education**

### **3.1 Chapter overview**

This chapter reviews critically the literature related to gender and gender construction in education, both from a national (Scotland and the UK) and international perspective. The methodology used to carry out the literature review set out in this chapter and in chapters 4 and 5 is explained in Appendix 7.

The gendered nature of the attainment patterns necessitated a review of literature to establish the gender issues: both of gender equity and gender identity. This review has not been restricted to academically able advantaged boys. The literature review found that there is limited research specifically focused on potentially academically able boys who were advantaged and underachieving. In the main, research focusing on achievement by gender was about all boys and/or all girls, or pupils from working class or deprived backgrounds. For example, some research that focused on boys and/or girls included Martino (2000) - boys' masculinity influencing negative behaviours and the relationship with the peer group culture, Myhill (2002) – 'off task' behaviour of underachieving boys and girls, and Martin (2004) – motivation of boys and girls. Read, Francis and Skelton (2011) and in other publications of theirs had as their focus high achieving girls. Examples of research with the focus on deprivation or working class pupils were Reed (1998) – case study focusing on gender, equity and justice, Condie *et al.*, (2006) – strategy review for the Scottish context, Smith (2007) - working class boys and their hegemonic masculinity, Dunne and Gazely (2008) - the impact of teachers' perceptions and assumptions about pupils from working class backgrounds, and Ingram (2009) - identity construction of working class boys and the impact on attitudes towards school. Lusher (2011) considered peer influence in different settings: 'academic' and 'non-academic' but did not focus on a particular group of boys. In this chapter the concept of gender has been considered more generally, and the significance for boys in an educational context more specifically.

The review began with an examination of the historical perspective of boys and their attainment compared to girls, including the 'panic' about boys' attainment voiced by some, for example Sommers (2000). This focus was explored against the backdrop of the rise of feminism and the call to address the lack of opportunities and outcomes for girls in the educational context. Gender theory and its development over time were used to understand some of the important feminist thinking in education throughout the period studied. This



proved to be a powerful lens to consider the concept of gender and gender identity more specifically.

The contested nature of gender and gender identity highlighted the complexity of gender construction and how this in turn can impact on how gender identities and gender roles affect the lived experiences of young people in the classroom. The impact of how boys navigate the gender landscape, including the interaction with peers, and the important influence that teachers have, both in the way they respond to boys and how they develop the classroom experience for pupils, were explored. Some of the solutions offered by different feminist stances are discussed. The chapter concludes with an exploration of how notably class - in this case the 'advantaged' middle class, gender and attainment intersect.

### **3.2 The significance of gender in education**

As we move through the 21<sup>st</sup> century, our lives are becoming increasingly complex, and no less so for young people in their lives as they negotiate social, cultural, relational, and technological changes. Beck and Beck-Gernsheim (2002) suggest that the contemporary world of young people is one where 'globalization' and 'individualisation' are taking over from the way people align to traditional communities, which in turn impacts on how people perceive their roles of gender, class and ethnicity within these communities. The school environment that young people, as pupils, inhabit is very much part of their lives and as such schools can have a powerful influence on pupils' lived experiences and how they perceive their identity. Schools are not gender-neutral (Arnot, 2005) and as such, consideration of gender in the context of the educational setting of a secondary school is a key consideration for this study.

In many countries, gender is still a significant lens through which schools and their structures, curriculum, pedagogies and achievement are viewed (Arnot and Fennell, 2008; Skelton and Francis, 2009). Gender is not a simple concept. Arnot and Mac an Ghaill (2006: 1) suggest in their collection of articles by theorists, looking through a gender and feminist lens, that the research of these theorists has illustrated

the complexity of gender relations and male and female positionings within the contemporary educational contexts and the uneven and difficult effects on boys and girls of social and educational politics and power.

Before considering the concept of gender, the next two sections are included to put the issues related to gender construction and the link to attainment, into a historical context.

### 3.2.1 Historical perspective

This section considers the attainment of boys, and, where there is evidence, of academically able boys, from a historical perspective, and provides the background against which current concerns about boys' attainment have emerged. Mention is also made of how this 'concern' has impacted on education: structures, the curriculum and pedagogies.

Difference in academic performance between girls and boys is not a new phenomenon and neither is the concern about boys' apparent underachievement. Cohen (1998) gives a useful précis of the historical perspective. Her research has revealed that throughout the period of her review, from the late 17<sup>th</sup> century to the present, "boys have always 'underachieved' and, more importantly, this underachievement has never seriously been addressed" (p. 20). Concern about boys' learning in comparison to girls' was raised as far back as 1693, in John Locke's *Some thoughts concerning education* (Cohen, 1998: 4) when the lack of boys' ability in Latin was compared with the ease with which girls were able to master French. The assumption here was that mastering Latin and French was equally demanding and the assessments could be seen as comparable. The focus in Locke's discussion was boys who were privileged and so potentially had ability. The explanation for boys' underachievement was put down to inappropriate methodology in the teaching of Latin. Cohen (1998) drew from research in the 18<sup>th</sup> century and cited "girls come to you to learn; boys have to be driven" (Schools Inquiry Commission [Taunton Commission], 1868, cited in Cohen, 1998) when trying to explain relative underachievement compared to girls.

Moving to the early 20<sup>th</sup> century Cohen (1998) cites boys as having "a habit of healthy idleness" (Board of Education 1923: 120). This was in contrast to the strong work ethic of girls, which was not applauded, rather it raised concern about the mental health of girls. Having "healthy idleness" was considered a positive trait and hence boys' underachievement was not seen as a problem. Indeed, this concept of 'overstrain' (Cohen, 1998) was a "determining factor in the differentiation of the curriculum according to sex" (Cohen, 1996: 132). This stereotypical<sup>14</sup> view of boys and girls was further illustrated by Brereton (1930: 94-5, cited in Cohen, 1998):

girls on the whole are more conscientious in their attitudes towards their work. Many girls will work at a subject they dislike. No healthy boy ever does! Hard work was a trait attributed to girls but not to boys. This research is suggesting that

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<sup>14</sup> Stereotypical: "a rigid, oversimplified, often exaggerated belief that is applied both to an entire social category of people and to each individual within it" (Sociology about, online).

boys and girls were two distinct homogenous groups with boys and girls being different. The emphasis was on girls' work ethic not being seen as a virtue and was even viewed negatively, whereas the lack of work ethic in boys was seen as 'healthy'. This construct for boys did not disappear. Displaying a keenness for academic work and diligence was not considered desirable and indicated a lack of 'manliness' (Power *et al.*, 1998). There was a perception that it was more important to focus on developing boys' 'character' than encouraging boys to work hard. Diligence was not valued over 'character' strengths. Indeed, the belief was that boys had a 'natural' ability that did not demand a strong work ethic (Collini, 1985). For boys, external factors were used to explain underachievement. In contrast, the internal characteristics of boys were used to explain their achievement (Cohen, 1998). Cohen raises the question here about the idea of 'potential' and this being attributed to masculinity. Girls who achieved were not seen as having realised their potential but were seen as achieving due to their hard work rather than their ability (Epstein, 1998: 106). However, more recently Connell (1989), with reference to the middle class boys in his study, found that boys' underachievement was not true of all boys as some navigate the hegemonic masculinity and achieve. This is an important stance, moving away from homogenising boys and girls.

The 1970s saw a paradigm shift in the equality landscape. Girls up to this point had not enjoyed equity in learning or curricular opportunities, which were considered to be limiting their life chances (Cotter *et al.*, 2004; Francis, 2005; Skelton and Francis, 2009). How women were perceived in society to a large extent shaped this outcome. The social environment of the time had fixed views of gender and gender role models. This was an outcome of the traditional industrial society where gender role models were played out according to societal norms. Women's lives were constrained by these societal norms (Francis, 2006a: 10). Men were the 'breadwinners' and women the 'homemakers', and educational provision was predicated on gender. Boys and girls were viewed as two distinct groups. Schools were seen as patriarchal (Spender, 1982) with structures and provision that were perpetuating inequity favouring boys (Dillabough, 2006). A key driver in this paradigm shift in education was the growth of the women's movements and development of various forms of feminism. The influences and impact of the growth of feminism as a social and political movement saw a demand for legislation in the area of equalities but this was bitterly contested and resisted (Connell, 2006: 109). The early feminist movement did much to change how women were perceived. Their fight for equal rights for women saw a shift in perception and was a precursor for the change in attitudes in education. For example, a study by Whyte (1984) developed and observed strategies to

introduce gender equality in a science classroom.

The *Sex Discrimination Act* 1975 (UK Parliament, 1975), which made it illegal to discriminate against women in education, and the Equal Opportunities Commission, which was set up as a result of the *Sex Discrimination Act*, worked to eliminate discrimination. This gave girls the right to access the same opportunities that had been granted to boys previously. Through the 1970s and 1980s, there was a growing body of evidence that highlighted the underachievement of some boys (Forde, 2008). The focus was on white working class boys. There were two perspectives of the ‘underachieving’ working class boy prevalent at the time. Firstly, that this group had become disenfranchised, which was raised as an equality issue; and secondly, that this group were being ‘scapegoated’ as a corollary of the ‘moral panic’ about boys being disadvantaged because of the focus on girls. For example, Willis (1977) carried out a study which showed how working class boys were influenced by school culture leading to some aligning with values of hard work and others exhibiting ‘laddish’ behaviour, which eschewed these values. Other factors were being recognised as potentially having an impact on attainment. The intersectionality of economic deprivation, socio-economic demographics and attainment was becoming apparent (Willis, 1977). However, ‘mainstream’ and reactionary educational thought was still seeing boys and girls as two homogeneous groups: with gender as a binary concept.

### **3.2.2 ‘Crisis’ of boys’ underachievement**

It was the 1990s that saw boys’ underachievement problematised. The increasing use of attainment data to define achievement (Epstein, 1998) and ability, and more importantly the analysis and publication of this data for public scrutiny, brought the difference in performance between some boys and some girls into focus. Epstein’s review highlighted boys’ underachievement in England, but the phenomenon of boys’ underachievement was also evident in Scotland (Croxford, 1999; Tinklin *et al.*, 2001; Forde *et al.*, 2006). Data was provided for performance by gender. The data used then, and more recently in STACS, did not provide enough information for detailed analysis of different pupil groups, for example by disadvantage/advantage (Cowie *et al.*, 2007). Although the attainment overall was improving, the gap between girls’ and boys’ performance remained. This evidence of boys’ apparent underachievement resulted in a growing concern and a ‘moral panic’ (Arnot *et al.*, 1999) with boys perceived as being left behind as girls gained ground. This became a political issue (Francis, 2006) and a public concern both in the UK (Epstein *et al.*, 1998; Griffin, 2000) and elsewhere (Parliament of the Commonwealth of Australia.

House of Representatives, 2002; Titus, 2004 (USA)).

Various reasons were put forward to try to explain the ‘gap’: increased opportunities afforded to girls through, for example, equality of access to the curriculum; greater recognition of achievement; and some used the argument of ‘feminisation’ of schools (Arnot and Mac an Ghaill, 2006). The claim of feminisation was because the teaching profession was female dominated, particularly in primary school, with a consequent lack of male teachers to act as role models (Skelton, 2002; Carrington and McPhee, 2008), and because the curriculum and pedagogical practices were more progressive and focused on the ‘child’ (Arnot and Mac an Ghaill, 2006). Girls becoming successful academically, against the backdrop of the political and public disquiet about some boys appearing to be left behind, gave rise to a ‘crisis of masculinity’ (Lingard 2003; Arnot and Mac an Ghaill, 2006). This resulted in a ‘backlash’ against the support and opportunities girls had been given (Lingard, 2003; Arnot and Mac an Ghaill, 2006; Lloyd, 2011). Boys were now perceived as disadvantaged due to this perceived undue focus on girls’ education (Tinklin *et al.*, 2001; Tinklin, 2003; Skelton *et al.*, 2006). The blame was attached to ‘advantaging girls’ with no account taken of gender constructs (Frank *et al.*, 2003). Boys seemingly being disadvantaged by strategies used to improve girls’ attainment (Tinklin *et al.*, 2001; Tinklin, 2003) led some, for example Sommers (2000), to call for a return to a pedagogical regime that would better suit boys, which was still her position in 2013 (Sommers 2013). It is important to emphasise here that there were still cultural biases, which saw some girls still not accessing or taking advantage of the opportunities afforded (Reay, 2006c) and so it could not be claimed that the issues in education for girls had been resolved (Forde, 2008). In addition, the focus on boys’ underachievement was seen as being true for all boys, seeing boys as one homogenous group, rather than focusing on the individual boys who were underachieving (Epstein, 1998; Skelton, 1998; Davison and Frank, 2006; Paechter, 2006).

This difference in attainment was acknowledged in the UK and, for example in Australia, Canada, Ireland and New Zealand. This was based on national data and the international perspective of such surveys as PISA (The Programme for International Student Assessment)<sup>15</sup> (Forde *et al.*, 2006). The analysis of the PISA survey, by gender, serves to illustrate the way such data can influence political decision-making and accountability as well as being a lens for public scrutiny and can lead to problematising a phenomenon. In

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<sup>15</sup> PISA: An international triennial survey (approximately 70 economies) assessing a random sample of 15-year-olds in reading, mathematics and science. The data is analysed by gender (PISA, online).

all of these countries there was concern raised about boys' underachievement. Chapter 5 reviews some the key studies that sought to address this underachievement. However, in other countries, with similar patterns of difference in attainment, boys' underachievement relative to girls did not appear to be problematised. Therefore, this suggests that policy decisions are not solely governed by the evidence but depend on the country with their differing 'cultural/political' responses.

Moreau (2011) explores the stance that two countries, England and France, have taken to boys' underachievement. The focus of this comparison is exploring the difference in two *developed* countries. (It is acknowledged that in the *developing* countries girls' achievement is the focus, because of the longstanding lack of rights to an education that girls have suffered.) What appears to be a global phenomenon of boys' underachievement is not generating the same level of engagement in France. Moreau argues this is not due to whether or not there is an acknowledgement of boys' underachievement: there is evidence of a similar gender difference in attainment in both countries, but about how gender is perceived and how the evidence is used to make a political case. In the UK, focusing on the individual has superseded the overarching traditional societal structures (Beck, 1992). This led to a transformational change in access for girls in education (Connell, 1987). During the 1970s and 1980s, the issue of equality for girls had prominence with key areas identified and addressed that went beyond raising academic performance, for example ensuring equal access to the same range of school subjects and equity in career choice. From 1990s the direction of policy shifted to a focus on boys in the UK because of the apparent underachievement.

In the UK, the policy is to cater for need rather than treating everyone the same. This policy is considered more equitable (Planel, 2009). In contrast, French policy is based on the culture of equal rights and not on catering for difference, which is considered unfair (Osborn, 2009). In France, their interpretation of egalitarianism guarantees individuals equal treatment hence there not being a focus on gender. Planel's (2009) research demonstrates how pedagogical practices are the product of this culture as she examines the practices in France and the UK. This lack of acknowledgement of gender issues has caused criticism from feminists in France, seeing the state as a "white middle-class man in disguise" (Moreau, 2011: 171). In France policy has tended to focus on socio economic factors and not on gender (Moreau, 2011).

Moreau (2011), in her study, also looked at how teachers in the two countries perceived

gender issues. The responses were different. UK teachers focused on boys' underachievement whereas in France this was not the dominant response. Where debates in France have focused on gender, these have been around equality of opportunities for both boys and girls, for example, improving subject choice and vocational guidance, education about gender equality and embedding this into pedagogy (Moreau, 2011). Boys' underachievement relative to girls has not been given prominence in the policy context. In France, this underachievement of boys is not considered an issue. Media reporting (BBC, 2013; Woolcock, 2016; Greenlees, 2016) in the UK continues to highlight the concern about gender inequalities in attainment whereas in France there is a lack of media reporting about boys' underachievement (Moreau, 2011).

Throughout history and, as illustrated above in the case of the different response in the UK compared to France, the way gender has been perceived from a socio-political understanding has had, and continues to have, an influence on both the education of boys and girls and on the reaction to boys' underachievement.

### **3.3 Gender and gender identity from a feminist stance**

Up to this point in this chapter, 'gender' has been used to refer to boys and girls with no consideration given to gender construction or identity. This section gives some of the key theorists' views on gender, the way the definition of gender has changed and how the construction of gender has had, and continues to have, implications for provision for all young people in an educational context. The critique is focused on these key areas rather than attempting to give an in-depth account of feminism. As mentioned in section 3.2.1, attitudes towards the gender inequity that girls were experiencing, and the focus on improving access and opportunities, changed and was influenced by feminists seeking equality for girls. However, it was not until the 1960s that there was a focus on gender as opposed to biological sex, the construction of gender and later a specific focus on gender identity.

#### **3.3.1 Modernist stance**

Early feminists focused on changing what was seen as an inequitable society where the roles of almost all men and women were determined by their biological sex (Dillabough, 2006). These feminists sought equality for women, demanding equal opportunities and social rights. This in turn impacted on the educational provision for boys and girls where

girls were being disadvantaged. This early feminist work in the late 1960s/early 1970s did much to create greater access and opportunities for girls, and shifted policy.

There were different stances amongst feminists, dependent on their viewpoints. The different terms and definitions used in feminism are contested. Beasley's (1999) interpretation has been used here to give working definitions of the different forms of feminism. The purpose is to illustrate the diversity of positions held by the different 'types' of feminism. *Radical feminism* took the stance that sexism was deeply rooted in society underpinned by patriarchal power and strove to eradicate the concept of gender difference through culture change because of what they believed was the dominant positioning of men over women because of their sex, and hence men were seen to hold a position of power. This even extended to the desire to eradicate the traditional family structure and reverse the power dynamics. *Socialist feminism* saw patriarchy as contributing to oppression of women through men having power and economic superiority over women: women were believed to be under the control of men. These feminists also fought to overcome other forms of oppression in society, not just those attributable to gender. *Cultural feminism* wanted to maintain the distinction between men and women, a binary stance, but seeing women and the roles that women played of equal worth to those of men. These feminists believed that modern society was disadvantaged by 'masculine' behaviour, for example by aggressive and competitive practices, and wanted to see more 'feminine' behaviour. *Liberal feminism* had a similar desire to see equality of access and opportunities for women and equal rights with men through legislation, but wanted, for example, to see marriage as an equal partnership. Initially liberal feminism did not focus on the power of men over women. Later liberal feminists did consider power and the contribution power was having in discriminating by gender in schools (Skelton and Francis, 2009).

In the late 1960s/early 1970s there was a shift to consider gender as a concept rather than being about sex difference. The work of Oakley was believed to have been the foundation for the consideration of gender, rather than 'sex', as a concept in education in the UK. Oakley (1972) proposed that using gender to consider inequality was more relevant than using biological sex difference because gender was a construct of social processes, and a product of culture, rather than determined by biological characteristics. In the late 1970s education feminism, using the premise of Oakley, began to explore gender construction, categorisation and relations, and the impact of context: the educational setting, moving beyond the sole focus on sex difference and role determinism (Dillabough and Arnot, 2002). Gender analysis also brought into consideration the power relations existing in society and how these power relations were impacting on the lived experiences of young



people in educational contexts, for example the concern about patriarchal school structures and the privilege of class. By the early 1980s the recurring theme was that gender was a ...theoretical construct, education as a site for the cultivation of gender equalities (Delamont, 1980) and a concentration on the relationships between state, national policy and the economy in shaping girls' education (Dillabough, 2006: 18).

In the late 1970s and early 1980s, education feminists were exploring social structure and its impact on gender, and the resultant effect on gender inequality in schools (Dillabough, 2006). Their agenda explored how the curriculum, in the widest sense, was gender specific and how this in turn was influencing boys' and girls' identities and ambitions (Dillabough, 2006; Skelton and Francis, 2009). These education feminists were still seeking equal opportunities and access for girls to improve their attainment through consideration of the curriculum and policies, which also included removal of discrimination to bring about gender equity reform. Dillabough (2006) cited the work of several theorists who began investigating the impact that the curriculum (Bernstein, 1978), pedagogy (Weiner and Arnot, 1987; Weiner 1994), and the structuring of schools (Spender, 1982; Connell, 1987) had on creating gender inequity, and on the ambitions and identities of girls. The key themes of all these early feminists work on girls' equality were "access to, treatment in and outcomes of educational experiences" (Skelton and Francis, 2009: 14). However, some theorists, notably Butler (1990), Mac and Ghail (1994) and Connell (1995) began to move away from this focus to one that considered gender identity as a construct rather than solely focusing on gender equity.

### **3.3.2 Postmodernist/poststructuralist stance**

The modernist stance that had been prevalent to this point was now overtaken by a postmodernist/poststructuralist perspective, which began to emerge in the mid to late 1980s, moving, as attributed to Francis (1999a), from a "realist to a relativist feminist framework" (Dillabough, 2006: 20). Gender identity was the emergent theme. This stance moved beyond gender equity to consider the interplay of society and culture on gender identity (Haywood and Mac an Ghail, 1997). Educational discourse and how this shaped gender identity was also a key area (Butler, 1993; Davies, 1993, 2014; Reay, 2001). This poststructuralist stance became the dominant paradigm as the importance of researching difference was highlighted (Hesse-Biber, 2012).

### 3.3.2.1 Sociological/cultural stance

The earliest work of social reproduction theorists identified schools as environments reproducing a culture that was orientated towards class and as such identities associated with class (Dillabough and Arnot, 2002: 12). Mac an Ghaill and Haywood (2011: 741) assert that there was an “institutionalisation of middle-class culture that often underpins contemporary schooling relations”. This determined girls’ expectations, attitudes towards education, and developed their identities (Haywood and Mac an Ghaill, 1997). These benefited middle class girls but not working class girls. One concern raised was that the agenda focused on values attributable to middle class girls rather than all girls (Arnot and Mac an Ghaill, 2006). There was less emphasis on difference amongst girls (Dillabough, 2006; Butler, 1990) particularly from a cultural standpoint (Dillabough and Arnot, 2002). With the panic over boys’ underperformance, there were accusations that schools were being remasculinised through the structures and the discourse of school accountability for performance, which in turn resulted in restrictive regimes (Arnot and Mac an Ghaill, 2006). This was believed to have resulted in some girls being marginalised with others conforming to the new order. This favoured middle class girls, who were able to operate in a way that was “autonomous” and “self-managing” (Arnot and Mac an Ghaill, 2006: 8).

With the breakup of industrialisation and the emergence of opportunities for women, with the upsurge of women achieving more, the public perception fuelled by the media was that men were now being disadvantaged, leading to the perceived ‘crisis of masculinity’ as highlighted in section 3.2.2 (Lingard, 2003). But this perceived crisis of masculinity did not take into account the changes in society and social relations with the resultant complexity of gender relations, and how males and females developed and played out their gender identities in the educational setting. There were some, for example Sommers (2000) who apportioned this perceived disadvantage experienced by boys to advantaged provision for girls, despite this poststructuralist view of the philosophical possibilities of multiple identities. However, as Butler (1990) asserts, regimes of power work to advantage and reinforce specific forms of identity, which reflect hegemonic discourses. A multiplicity of gender identities rather than one ‘fixed’ gender identity was a key tenet of poststructuralism/postmodernism.

Arnot and Mac an Ghaill (2006) suggest that the change from the traditional society, with gender no longer sited in the normative roles, makes way for individualism (Beck and Beck-Gernsheim, 2002), which sets gender as a concept in education, with individuals

taking responsibility for their own performance. “The relationship of gender to education is, from this perspective, transformed into individualised subjectivity and desire rather than predetermined socialisation patterns” (Arnot and Mac an Ghaill, 2006: 3). However, the evidence given by Arnot and Mac an Ghaill (2006) suggests that there remains an impact of “social stratification” (p 4). Gender is the realisation of social, cultural and historical construction (Arnot and Mac an Ghaill, 2006).

Willis (1977) concluded that gender identity was more complex than was suggested by consideration of the school culture alone. Young people themselves were believed to be constructing their own identity, which was dependent on the school environment, but also their own cultural identity, adding a layer of complexity to the understanding of how boys and girls responded to their school experiences. This new way of considering identity was moving away from the ‘essentialist’ perspective and of those radical/cultural feminists, who maintained the binary concept of gender but reversed the power relationships, to a feminist position which began to consider a broader concept of gender “as a more permeable social construct held together through elements of discourse” (Dillabough, 2001: 20). Judith Butler (1990) was preminent in the field leading this concept of ‘discourse’ shaping gender and gender identity, which shifted thinking from gender construction through social and cultural influences to a more philosophical stance.

### **3.3.2.2 Philosophical stance**

The assumptions of identity are implicit in the work of the philosophical poststructuralist theorists (Butler, 1993; Fuss, 1996). The poststructuralists’ stance of deconstructivism has the focus on identity not being intrinsic or essential but rather identity being fluid and a function of the many social relations that a person can experience. Deconstructivism through ‘deconstructing’ the assumptions upon which existing gender power relations are based challenges the concept of a fixed ‘singular’ identity (Haywood and Mac an Ghaill, 1997: 267). Identity is a process rather than a fixed entity: ‘becoming’ rather than ‘being’ arising from a range of discourses (Butler, 2006). The poststructuralist stance is that gender is not something that is fixed, and to make an impact on gender equity multiple gender identities must be considered and understood.

#### ***Multiplicities of ‘masculinity’ and ‘femininity’***

The singular concept of gender was making the assumption that all boys and all girls were the same and formed distinct homogeneous groups. There was no consideration of how the

different identities of boys and girls played out in society or in an educational context. The modernist view of gender being binary: gender identity being one of ‘masculinity’ or femininity’ (Gilligan, 1982; Baker Millar, 1986) was being overtaken by the postmodernist/poststructuralist view of gender being a multiplicity of masculinities and femininities. Thinking was evolving to consider the diversity of gender identity. With the focus on the complexity of gender identity there was a reconceptualising of masculinity from this singular identity: from seeing masculinity as fixed and unidimensional, and the same masculinity acted out by all boys, to ‘masculinities’. “Masculinity is not fixed but rather constituted and reconstituted over negotiated circumstances and time, consuming a great deal of thought and energy” (Frank, 1996: 115). This then began to raise questions about understanding and exploring how masculinities were practiced in a school setting and how the different masculinities navigated the gendered school environment. The emergent theories of multiple gender identities were considered from several perspectives. Poststructuralist educational feminists had shifted their stance from ‘women’ and gender equity, through considering pedagogy and policy, to discourses about ‘femininities’ and ‘masculinities’ (Connell, 2006; Dillabough, 2006: 22).

As an outcome of the different perspectives of feminist thinking, many researchers critically examined how boys lived out their lives in schools but seeing boys not simply as males with one masculinity but as young people with multiple masculinities (Connell, 1987, 1995, 2000; Frank, 1987; Mac an Ghaill, 1994; Epstein, 1998; Gilbert and Gilbert, 1998; Martino, 2000; Jackson, 2002a; Davison and Frank 2006). This is not to suggest that there are no dominant forms of masculinity. These dominant forms are advantaged by power relationships and hegemonic discourses (Frank 1987). However, it is important to be aware that considering different types of masculinities can lead to further categorisation, resulting in a static view (Francis, 2000a).

### ***Gender and discourses***

Discourses are

regulated and regulative body of ideas and sets of knowledges which (promote wider and deeper thinking and questioning for sense-making and future possibilities and action) delimit the kinds of questions we can ask, the ways in which we might make sense of the world, the potential pathways for future development and insight (Reed, 2006: 33).

Discourse is not just a set of ideas but is grounded in practice and impacts on practice and is shaped by context. Reed goes on to consider the concept of ‘powerful discourses’ becoming ‘regimes of truth’ which was an expression coined by Foucault (1972).

Discourse is not simple but considers the complexity of knowledge. The interplay of knowledge and power is also considered with power being realised through the complexity of “relationships” and “practices” (Reed, 2006: 33). To consider power is to consider influence and therefore how power impacts on action. Reed (2006) also considers action arising from the discourses as “praxis”, which she defines as “critically informed and reflexive” action that is looking for meaning and making sense of experience (Reed, 2006: 34).

There are several discourses founded in language that are seen as influencing gender identity, for example, underachievement, pedagogy, the culture of peers, and teachers, and support offered in schools, rather than socialisation shaping culture (Dillabough, 2006). Butler (1990), who takes the stance that gender is based on discourse, sees gender as philosophical rather than sociological.

To look for solutions through the philosophical feminist lens means that the complex discourses that operate to impact on masculinities within the school setting, and how these affect the lived experiences of young people and the practice that exists in schools, must be considered. This is to problematise the concept of underachievement from a poststructuralist, discursive standpoint with a ‘praxis’ approach (Reed, 2006). Critiquing the gendered nature of the underachievement demands consideration of this discursive-praxis approach to seek deeper meaning and understanding of the lived experiences of young people: making sense of the ‘problem’, rather than simplistic solutions that appear to solve the problem.

Judith Butler asserts that gender is “performative”, a series of “acts” that are repeated to constitute an identity. What is concluded from this is that if repetition is ‘disrupted’ and the acts change then the identity can also be altered (Butler, 2006: 61). Butler argues that “one is not simply a body, but, in some very key sense, one does one’s body” (Butler, 2006: 62). In addition, the body is linked to the historical context and cultural and social practice. If the “acts” conform to cultural norms and these are stereotypical then the gender identity is indistinct from sex (Butler, 2006: 65). Thus duality of gender remains. Bronwyn Davies illustrates this in her work. What Davies (2006) asserts is that in the schools she investigated, using a deconstructivist stance, the duality of gender and gendered practices still existed.

There is also the issue of social norms and how others perceive and respond to the

“performing” of one’s gender. There is “gender regulation and control” (Butler, 2006: 68). Those who are not considered by others to be performing gender ‘well’ are punished, which perpetuates the perception of gender essentialism. Therefore, considering the meaning and the importance of identity from the poststructuralist stance brings into question how different identities are accepted as the norm and how these are shaped by discourses (Butler, 1990).

The work of Francis (2009), Martino (1999) and Ringrose and Renold (2010) illustrates the impact that discourse has on gender identity development and how some become privileged over others within a hegemonic masculine culture: the ‘nerd’/ ‘macho’ culture; the ‘boffin’ as ‘abject’ (Mendick and Francis, 2012). Further the discourse of underachievement as an identity attributed to boys can develop a particular response shaping policy and practice (Reed, 2006).

Examining the phenomenon of underachievement by exploring the gendered educational discourse from a poststructuralist philosophical perspective is not seeking to eliminate the concept of gender but to understand underachievement from this standpoint. Using this stance disrupts the status quo and forces change. “It is the very act of refusing categorisation that enables a shift in thinking about gender” (Davison and Frank, 2006: 159). The solution desired by Butler, who aligns with a poststructural philosophical stance, would be to seek a new way, a desire for a deeper understanding, and acceptance and tolerance of the range of masculinities and femininities, to move away from gender being used as a category of analysis (Dillabough, 2006). Continuing to use gender as a category is believed to continue perpetuating the belief that there is difference between boys and girls and hence a duality of identity – essentialism.

### **3.3.3 Different feminist stances: Is there mutually exclusivity?**

Within the poststructural paradigm, a philosophical and sociological/cultural stance are not mutually exclusive. Deindustrialisation and feminisation of the labour market, and changes in family structures are shifting how people live their lives. This influences the societal and cultural context but also the construction of gender, and shapes the performativity of gender as described above (Haywood and Mac an Ghaill, 1997: 262). Therefore, it is still important to explore the societal, socio-economic and cultural implications of gender identities (Haywood and Mac an Ghaill, 1996a, b) and the impact that the school environment has in shaping these identities (Haywood and Mac an Ghaill, 2006), which in

turn could be impacting on how young people view education and its purposes.

Poststructuralism and modernism can coexist in education with their competing sets of assumptions and explanations. As poststructuralism seeks to understand and find explanations for the complexity of gender identity and its impact and how this is shaped by society and culture, and discourse, modernism has a place in continuing to consider gender inequity from a pragmatic standpoint until gender inequity no longer exists and gender as a concept is no longer necessary as a category of analysis.

### **3.4 The contested nature of gender and gender identity**

Many young people in their teenage years are grappling with their own identity. Gender identity, class: disadvantage and privilege, race and ethnicity can all have an impact on learning and how the young person perceives their learner identity. This in turn can affect relationships with their peers, teachers and how they engage with their academic study and ultimately their school performance (Sadowski, 2008). The discussions in the previous sections have illustrated how the understanding of gender and the construction of gender identity moved from a modernist to a postmodernist/poststructuralist stance as theorists tried to explain the complexity of gender identities as they were lived out in school environments. “That there are patterns of behaviour and social organisations that differ according to sex/gender is not in doubt” (Francis, 2006a: 8). However, how gender is constructed and perceived is contested and deeply politicised (Butler, 1990; MacInnes, 1998).

The simplistic view that gender is about sex is still a contemporary concept. As recently as 2010, gender equality was defined by sexual characteristics. The guidance of the Equality and Human Rights Commission for the *Equality Act 2010* (UK Parliament, 2010) gives the definition of sex as pertaining to “a man or a woman”. This definition is purely about biological difference with no consideration of the concept of gender or how gender may be attributed to any social or cultural influence, or discourse. The view of gender differences being about ‘nature’ or biological difference has been expressed by some theorists, for example Halpern (1992), Gurian (2002), Baron-Cohen (2003) and Geary (Stoet and Geary, 2013). Conversely, empirical evidence has been collected that would show no difference in cognitive ability by gender (Deary *et al.*, 2003).

Trying to explain gender difference either through the societal impact or by biological sex

is challenging because these are not mutually exclusive. Indeed, the conflation of sex and gender is problematic (Francis, 2000a; Francis, 2006a). Rose (2001, cited in Francis, 2006a: 8) wrote about the “tired dichotomy of nature versus nurture” with the belief that instead how behaviour is enacted should be considered, and from a different standpoint with “specificity and plasticity”. Butler (1993), as discussed in earlier sections, led the way in seeing gender identity as fluid and changing depending on context. Further, Butler (1990), (1993) and Connell, (2002) argued that the prevalent concept of gender with two mutually exclusive categories was evident at the time of their research and determined how boys and girls were perceived.

Assuming a binary gender system based on biological sex, and continuing to use the terms ‘female’ and ‘male’, ‘girl’ and ‘boy’, perpetuates the particular social meaning attributed to the female and the male, which is based on a differential distribution of power (Davies 1989; Butler 1990). These ‘regimes of power’ reflect the hegemonic masculine discourses and those who do not conform to the dominant forms of masculinity and femininity are seen as deviant or ‘other’ and are ‘abjected’. This causes those boys who do not fit the prescribed masculine identity to be disadvantaged (Frank *et al.*, 2003). These “powerful ideologies of gender as mutually exclusive sets of attributes – femininity and masculinity – shape the experiences of children and young people in schools today...” (Forde, 2008: 8). This continues to be an area of enquiry. Skelton *et al.* (2010) in their study of adolescent achieving girls continued to find gender identities and roles that could be ascribed as ‘traditional’ and not as offered by poststructuralist thinking. Therefore, it is imperative that consideration is given to gender construction and gender related issues in the school environment, but not in a “deterministic way” (Forde, 2008: 8).

In addition, the interlinking of sex and gender leads to behaviour being seen as either masculine or feminine and this can be problematic as discussed above, risking “biological essentialism” (Francis, 2006a: 14). This perpetuates the differences ascribed to gender (Francis, 2000a; Skelton and Francis, 2002; Francis, 2006a). Gender, as a socially constructed concept, should not have behaviours classed by sex (Butler, 1990; MacInnes, 1998). For example, Mendick (2005) in her study of boys and girls studying mathematics found the associated behaviours of the pupils involved were along traditional gender lines. Labelling behaviour as ‘masculine’ or ‘feminine’ is problematic and should be contested (Francis, 2006).

Furthermore, young people act out gendered patterns of behaviour that they believe are



expected within the dominant culture of a school (Davison and Frank, 2006). This has led to a normalising of specific forms of masculinities and femininities in terms of expected behaviour. Gender difference is well understood and lived out by young people by the time they reach secondary school. School “microcultures and management, teachers and students are key infrastructural mechanisms through which masculinities and femininities are mediated and lived out” (Mac an Ghaill, 1994: 4).

### **3.5 Gender in the classroom**

To explore the issues around academically able boys’ lower performance compared to girls in this doctoral study, the key question is in what ways does gender impact on learning in the academic learning setting which in this and most schools is the ‘classroom’. The school in question and the other schools used in this study are co-educational and so accommodate both boys and girls at all stages. Pupils in these schools are not segregated by gender into separate classes.

There are three areas that were explored: identity and how the classroom environment impacts on a pupil’s learner identity; the relational impact of others: peers and teachers; and views on classroom policy and pedagogical practices to impact positively on boys in the classroom setting.

#### **3.5.1 Identity and the classroom**

The previous section has detailed the importance of gender identity and how this is contested. Gender identity has implications for young people and their lived-experiences in the classroom. If the stance of Butler (1988) is considered (of gender being ‘performative’ and gender constructed through how individuals navigate their day-to-day practices) this begins to explain how young people navigate the complexity of the classroom environment. Gender is displayed in the way young people dress, and in their communication (Butler, 1988). This can change depending on the activities they are engaged in or on the setting. It is the “stylised repetition” of gendered practices that is performed (Butler, 1988: 519). Therefore, gender becomes embodied.

It is important to recognise that not all boys act in the same way and this can depend on the environment. Studies highlighted in Skelton and Francis (2009) describe how boys behave to navigate the school environment: many developing behaviours that are contrary to the

school discipline. The tensions that can arise between being a boy and achieving were identified: the tension between the demands of being a boy and on conforming as a pupil with deference: not attention seeking and working hard, which is suggested is the opposite expected of the 'typical' boy. However, Skelton and Francis (2009) emphasise that this does not apply to all boys. This need to be a boy has implications for learning and achievement and is strongly influenced by their peers around them in a learning setting.

### **3.5.2 Relationality**

Classroom environments by their nature involve others: peers and teachers. The research suggests that peers have a strong influence. There is a pressure on boys to conform through the influence of the dominant masculinity, which demonstrates the power that boys have over each other (Connell, 1995). This power is often 'seductive' and 'coercive' (Skelton and Francis, 2009). Skelton and Francis (2009: 114), using the work of several researchers, concluded that "constructions of masculinity are produced in opposition to femininity (and vice versa)" and gender difference persists in the classroom. 'Laddish' behaviour that manifests in 'having a laugh' and opposing authority is disruptive for all who are trying to learn as well as those displaying this type of behaviour: but also runs contrary to the expected behaviour conducive for learning. This has previously been seen as the province of the working class boy (Jackson and Salisbury, 1996; Willis, 1997; Jackson, 2002a). However, Martino (1999) suggests that this is no longer just the province of the working class but is also exhibited by middle class boys.

Martino (1999) stated that high achieving, middle class boys in the classroom setting were unwilling to contribute in class to preserve their masculinity. In Martino's research the high achieving boy tended to display the same characteristics as the underachieving boy. This tendency appears to be more prevalent in the compulsory years of schooling. It is expected from peers that boys will have a strong focus on for example sport but not on schoolwork. However, it appears that once a boy moves to the sixth year in senior school, it is acceptable to be considered as being diligent academically and doing well (Epstein, 1998). (Epstein's was a study carried out in England). This is explained as "hegemonic, middle-class masculinity" (Epstein, 1998: 103). Epstein goes on to discuss that professional middle-class men, who work hard, are considered more masculine and there is a competitive element to this characteristic. This shift from being competitive in for example sports may translate to the capacity to work hard.

Achievement is a function of engagement in class and is dependent on perceived ability (Duffield *et al.*, 2000; Myhill, 2002). Forde (2008) discussed how achieving girls exhibited positive engagement and good behaviour throughout their school career but high achieving boys varied in their level of engagement and participation. Boys who are not sure of themselves and feel a sense of vulnerability will work to seek approval of peers and this can exhibit as not seeing academic standing as important (Jackson, 1998: 89; Power, *et al.*, 1998). The study by Whitelaw *et al.* (2000) agrees with this conclusion. They found differences in behaviour and attitudes to academic study between girls and boys, with girls being more accepting or compliant and conforming to the school norms. However, it could be argued that girls have a greater awareness of their position and are more able to navigate the positioning of being academically able as well as navigating their social sphere with both peers and adults. Boys appear to take longer to understand that they can be successful academically and be popular with peers. Boys seem to want to do well academically but their concern about being ostracised is overriding. The 'coolness' and 'poor behaviour' run counter to working for academic success. However, Skelton (2010) gives a similar conclusion for girls where she suggests that girls considered high achieving are concerned about performing well but also their relationships with others in the class.

In contrast, there have been several studies looking at both academically able boys and girls and how they navigate the gender landscape successfully. Jackson (1998) found some academically able boys are able to achieve without appearing to work. Some have a ‘‘cool’ cleverness image’ that gives them the opportunity to work without being teased by others (Bleach, 1996, cited in Jackson, 1998). Francis (2010) in her study considered the construction of gender and gendered behaviour for groups of high achieving pupils in nine schools in England, using a mix of gender, socio economic background, ethnicity and popularity. They sought to interrogate gender monoglossia and heteroglossia using the empirical evidence. Heteroglossia was overtly evident in a number of cases. It was noted with interest that high achieving boys and girls were more ‘monological’ in how they acted out their gender. This was considered to cover up underlying heteroglossia of their gendered behaviour. As explained in Francis (2010: 479)

Bakhtin (1981) argues that language is never neutral, but rather reflects and constructs power relations. He uses the term ‘**monoglossia**’ to refer to **dominant forms of language representing the world-view/interests of dominant social groups**, which are positioned or imposed as unitary and total. However, for Bakhtin language is never static or fixed, but is rather diverse, with different meanings and readings constantly jostling in assertions or subversions as subjects use language in different ways. Hence while at the **macro-linguistic level there**

**may appear to be stability, at the micro level there is fluidity, contradiction and resistance: heteroglossia.** Bakhtin explains: Unitary language constitutes the theoretical expression of the historical processes of linguistic unification and centralisation, an expression of the centripetal forces of language. A unitary language is not something given but is always in essence posited – and at every moment of its linguistic life it is opposed to the realities of heteroglossia (1981, 270).

This concurs with the work of Martino (1999), Skelton (2001), Swain (2002), Jackson (2006), Francis (2010) and Skelton and Francis (2012). Francis (2010) found that academic boys who were popular in a masculine activity, for example football, had status and this allowed them to be academic without affecting their masculine gendered identity. Equally, successful girls were found to exhibit similar characteristics, showing traits associated stereotypically with males, being confident and competitive. Forde (2008) also cites that boys can be able and exhibit non-hegemonic behaviour and be accepted by their peers.

Hence gender heteroglossia operates within the individual gender ‘attributes’, as well as within individual performances, and more broadly within the whole (apparently monoglossic) system of gender (Francis, 2010: 488).

Skelton and Francis (2012) considered high achieving pupils in the context of the ‘Renaissance Child’. (This expression used by Skelton and Francis is attributed to Vincent and Ball (2006) in their book *Child-care, Choice and Class Practices*.) Their conclusions suggest that boys are able to exhibit ‘Renaissance Masculinity’, that is boys being able to develop the breadth that is the ‘Renaissance Child’ and declare their interest in subjects such as English, which could be considered feminine, and still be popular amongst peers. ‘Renaissance Masculinity’ with the eclectic skills and qualities that this brings is considered to be important for future career prospects. These researchers did not see the same opportunities for girls to be so overt in their choices for fear of risking their positioning amongst peers.

Where a boy, or indeed a girl, is not popular there appears to be more of a challenge in how they navigate the gendered environment, particularly with peers. Mendick and Francis (2012) discuss the ‘geek’ or ‘boffin’, acknowledging that not all high achieving pupils are labelled ‘boffins’. There is some debate between Mendick and Francis of the positioning of the ‘geek/boffin’. Francis describes the boffin as abject: ‘cast out’ by the peer group because of the way they behave as a geek. This was found to be true in a variety of schools with different characteristics. This was seen as the dominant culture. This leads to others modifying their behaviour to avoid the impact of being seen as a boffin. There is therefore

a conflict between aspiration to achieve and acceptance socially by peers (Francis, 2009). Mendick, whose study is focused on mathematics undergraduates in tertiary education, gives a different perspective on the boffin when she describes the privileging of boffins as they gain qualifications being seen favourably by teachers, as well as gaining status beyond schools as belonging to a ‘nerd’ culture. Mendick also maintains that the characteristic of ‘nerdiness’ has become popular in the media. However, Francis asserts “the sexuality of boffin girls and boys tends to be pathologised by peers as homosexual in the case of boys and asexual in the case of girls” (p.18). The agency or ‘ownership’ is also dependent on context and culture and stage: school/post school contexts. The findings suggest there is still the sense of boffins in schools feeling and being isolated by peers. Shaping a culture of aspiration and ambition could counter this boffin identity as being negative (Mendick and Francis, 2012). Francis makes the claim that teachers can reinforce this concept by their behaviour in focusing on ‘popular’ pupils, not wishing to be paying particular attention to boffins, and actively distancing themselves.

Teachers have an important influence on gender and gendered responses. Reed (2006) discusses the significance teachers’ responses have to gender through their interactions with young people, “the way in which classroom processes are active in the construction of and sustenance of this.” Reed recounts from her work how teachers can have difficulty working with boys. “Models of how to work in an emancipatory way with girls do not easily transfer across the gender divide” (p. 44).

Skelton and Francis (2009: 118) drawing from a large number of studies conclude that how masculinity is constructed, which has been shown to be important in a secondary school setting, could be having a negative impact on school performance and be impacting on not just those boys who are exhibiting this type of hegemonic masculinity but also on others, and is arising from the “relational constructions”, and suggest it is one of the reasons for the “gender gap” in attainment.

### **3.5.3 Classroom policy and feminist solutions**

With the crisis of masculinity discussed earlier in this chapter the response was ‘re-masculinisation’, to redress the balance of what had been seen as feminisation of schools and schooling. However, this response did not acknowledge the complexity of gender and gender identity: diversity of masculinities (Epstein 1998; Davison and Frank, 2006) and the complex interplay of gender and schooling (Simpson, 1996).

Policy that highlights the importance of considering young people as individuals rather than by gender, and the restrictions that can exist for young people if gender is considered simply as either feminine or masculine, is a positive step to meeting the needs of all (Davison and Frank, 2006). However, this raises some challenges. Kenway (2004, cited in Forde, 2008) raises the question of how this poststructuralist view of gender identities can be considered in a school in addressing the needs of young people, whilst at the same time providing a structured, practical curriculum.

Forde (2014) in her critique of addressing gender in the classroom discusses three different pedagogical responses: gender '*neutrality*', gender '*sensitivity*' and gender '*friendliness*'. As Forde explains, to have a gender *neutral* environment is where gender plays no part, with the assumption that gender is not recognised as a factor in the lived experiences of young people in a classroom setting. The previous two sections would suggest that young people do live in the classroom with gender being part of their lives as learners. It also ignores the power relations that exist arising from hegemonic masculinity. The 'female' or gender *friendly* environment is suggesting that one gender is set against the other. Liberal feminists focused on a girl *friendly* approach with equal access to all areas of the curriculum and removing gender bias in pedagogy and the curriculum, with a strong focus on equal opportunities. This was in contrast to radical feminists who were more concerned with how girls were treated and their outcomes and how these were influenced by social structures. This resulted in a girl *centred* approach. The direction of these feminists was to challenge patriarchy in the system and focusing more on oppression of girls and women than equal opportunities (Skelton and Francis, 2009).

In contrast, a gender *sensitive* environment has been considered by some, for example Davies (1997) with the development of pedagogies that do not focus on gender difference, with pupils treated as individuals with individual needs and desires, as well as recognition and valuing difference (Skelton and Francis, 2009). To have this gender *sensitive* environment is one where gender is considered in practice and interactions, where relevant, but with the cautionary note to have an awareness of not having gender duality and stereotypical responses, reinforcing gender difference. Mendick (2005: 218) raises the issue of consideration being given to pedagogy, with gender *sensitive* classrooms to engage both boys and girls with the variety of gender identities that exist. Scantlebury *et al.* (1996) also illustrate the positive impact of teachers using this gender *sensitive* approach, and with their interaction in classrooms. However, it must be stressed again that this is not all boys and all girls. Considering individuals is important and boys and girls should not be seen as

homogeneous groups. Forde (2014: 375) concludes

This construction of gender in a gender-sensitive approach places the audience/reader in a critical role. Thus, in a classroom, teachers and students can begin to appreciate both the possibility of multiplicity in behaviours and attitudes while at the same time understand the operation of hegemonic discourses including those that underpin policy, curricula and pedagogy which reify narrow definitions of gender appropriateness.

### **3.6 Intersectionality**

To only consider gender identity when exploring underachievement in boys would be inadequate. Aspects other than sexuality shape a young person's life, notably culture, class and disability. Young people live in different social groupings and networks that are not predicated on gender. Class, culture and 'self' are intertwined (Skeggs, 2004). There is a need to consider 'intersectionality'. Intersectionality as a metaphor was originally associated with inequality and oppression of black women (Carastathis, 2014) and coined by Kimberlé Crenshaw in 1989. Holvino (2010) goes further to suggest that although intersectionality is a concept that is used by feminists, there should be a

reconceptualisation of gender, class and race as simultaneous processes of identity, institutional and social practice. By processes of identity practice, I mean the ways in which race, gender and class produce and reproduce particular identities that define how individuals come to see themselves and how others see them (p. 248).

Intersectionality is a term that has developed to become a way of considering the interplay of different categories that shape an individual's identity: identities arise from the social groupings or networks to which an individual belongs. For example, in the late 1970s Willis (1997) found that when considering boys' underachievement, factors other than gender were seen to be having a negative impact, notably poverty and class. Also during that time gender identity for women predominated over class because social class alone did not explain oppression of women (Kane, 2011). Mac an Ghaill and Haywood (2011: 730) suggest that consideration should be given to "the renewal of class analysis of schooling, social relations and identity formations" to establish an understanding of the complexity of their interaction. This is to respond to "the productive tension between materialist and poststructuralist positions". Further, they suggest that intersectionality is not simply the addition of, for example gender and class but how they articulate with one another. There should be a focus on the "indivisibility of social categories" (p. 738).

In this study, the boys who are perceived to be underachieving belong to a social grouping

that could be considered advantaged or privileged and not oppressed. All of the boys were white. There is a range of work that has considered the intersectionality of gender and working class to explore identities and disengagement with schooling both in primary and secondary schools: Francis (2000a, 2005), Reay (2001, 2002), Renold (2004), Jackson (2006), Dunne and Gazeley, (2008). Race, ethnic and cultural impact on boys' attainment is well documented. There appears to be lack of academic literature on the intersectionality of attainment, gender and class with a focus on boys and privilege as far as can be determined. In this section I explore the concept of class and the intersection of this with attainment and gender.

The concept of class is complex. Knights (1990, cited in Mac an Ghaill and Haywood, 2011: 738) suggested that social class could be thought of as a set of descriptions of 'self-production' spread through a "multiplicity of power relations." Reay (2006a) argues that social class is critical to how a learner sees their identity and is an important consideration for education. Class like gender is a social category. It is important to stress that living within a social grouping or network does not mean that how an individual acts out their class or social role is fixed, or that groupings are homogeneous. As Butler (1993) used the concept of enactment for gender, others use a similar philosophical approach for social or class identity. Furlong *et al.* (2011: 360) makes the distinction between the "structural historical condition" which suggests a fixed class identity, and the individual's lived experience, which is fluid and iterative, ever changing through constant repetition. This concurs with Beck (Beck and Beck-Gernsheim, 2002), who suggests that the world has moved towards "individualisation". Furthermore, Furlong *et al.* (2011: 366) uses the concept of the 'social generation' framework to explore how, in the longer term, culture is exhibited in the social context. The social generation framework has multi-generational units that respond differently in different social settings reinforcing the fluidity of social identity.

Bourdieu (1990) developed an approach that uses concepts of 'habitus', 'capital' and 'field' as tools to provide an analysis of how identities are constructed within social groupings. These groupings have structure and norms. Habitus is how individuals live out their social identity and comes from within the individual, shaped by the social aspects of their lives, notably their family. Habitus is complex because of the interplay of different socialising experiences. The way individuals behave is explained using habitus. The field is the context in which the individuals find themselves. Habitus and field are continually interacting. The third tool of capital, with the specific focus on 'social' capital, is an



individual's positioning according to power within a social group or network and 'symbolic' capital which is associated with role. The analysis of intersection of habitus and capital could be considered to explain academic engagement within the school setting. Both the tools ascribed by Furlong *et al.* and those by Bourdieu are being applied to social identity. Reay (2006c) suggests that social class shapes gender and other identities, which presupposes that the concepts of gender identity and social identity/class identity are not mutually exclusive.

The habitus of middle class adolescent boys is strongly influenced by family expectations and aspirations and, according to Arnot (2002: 43), is shaped early in a child's life. Arnot (2002: 43) further postulates that

This 'habit-forming force' becomes the foundation of perceptions and appreciation in all subsequent experiences – educational action may transform early training but according to Bourdieu, it can never totally reverse its effects.

The expectations of middle class families are to be successful academically, usually through university entrance, to allow access to professional careers (Savage *et al.*, 2001). Skeggs (2004:135) describes how possessions shape their middle class "personhood". And to be middle class is to work at acquisition. Further, Skeggs asserts that it is important to be aware of the rules, but more importantly knowing how to display behaviours that identify with the rules. This is pertinent here for young people living with privilege who are aware of what expectations are placed on them to retain the status of the family.

Schools and classrooms are active in shaping pupil identity. One study by Ingram (2009), examining the habitus of working class boys in Northern Ireland, shows how boys' identity is shaped and reshaped by the schools they attend. Although Ingram's study is about working class boys, it is possible to extrapolate to middle class boys, the subjects in this doctoral study, and how the school can construct their identity. Reay (2006a: 296) cites evidence that educational systems cater for middle classes interests, which suggests that schools are inherently shaping a 'middle class' identity. In addition, the discourse of underachievement is one that could be impacting on academically able boys. This could have an impact on how middle class boys perceive and construct their learner identity, which is displayed in their behaviours. Frank *et al.* (2003: 123) discuss how the lived experiences of boys and how they perform academically as "multiply constructed within the intersections of a variety of social positions, including issues of race, class, ethnicity, sexuality and ability."

This intersectionality of class and gender, with the complexity and fluidity of both of these

identities, gives young people many choices and through the enactment of these choices how they navigate them (Furlong *et al.*, 2011). The complexity of class and gender, their interplay, the power relationships and the hegemonic discourses within both class and gender will impact on social identity. Mac an Ghaill and Haywood (2011) recommend that work is needed to consider how to make schools less centred on the positioning of class. They suggest that schools are still perceived as reinforcing class and class divisions, but at the same time giving an environment that is complex in terms of identity construction for young people to experience. From the literature, it suggests that there is pressure on middle class boys to meet the aspirations and expectations of parents but at the same time navigating the multiple masculine identities. This intersection could be contributing to shaping behaviour and attitude.

### **3.7 Concluding remarks**

This review of gender theory set a context for this study of the gendered patterns of attainment explored through the voices of pupils, teachers and their parents. Using the arguments discussed about the contested nature of gender raised questions for this doctoral study about the complexity of boys' identities in the contemporary context of a Scottish secondary school, particularly those boys who would appear to have the ability, and the advantage to be academically successful; how gender is perceived within the educational setting both from the perspective of young people themselves, teachers and parents; and how this could be shaping pedagogical approaches, relationships, expectations, and aspirations. This also raised issues about if, and in what ways, teachers are interacting with pupils from a gender critical perspective and how teachers are considering the complexity of gender identity in their practice Reed (2006: 44).

## **Chapter 4: Gender and Attainment**

### **4.1 Chapter overview**

In this chapter, the literature review focuses on appraising critically the policy context of gender and, more specifically, attainment within Scotland from the perspective of the national education system, and also from the perspective of Scotland being part of the UK, and as a consequence being subject to UK-wide and European legislation on equality. The response to demands of policy are examined. The findings from research, both nationally and internationally, of gendered patterns of attainment are discussed, with a focus on gender differences between more academically able pupils, the subjects of this thesis.

### **4.2 The policy context – equality**

Schools in Scotland are required to examine attainment at different stages and levels as part of their accountability for pupils' progress mandated in the *Standards in Scotland's Schools etc. Act 2000* (Scottish Parliament, 2000a). This continues to be a focus for HMIE (Education Scotland, 2015) and the Scottish Government, as laid out in the *National Improvement Framework for Scottish Education Achieving Excellence and Equity* (Scottish Government, 2016). There is also a duty on local authorities throughout the UK to report on progress on providing equal opportunities in schools, including those related to gender. This section considers the development of policy in Scotland relating to gender and attainment and how this has raised concerns about underachievement, with particular reference to the most academically able pupils in the 16 to 18 age range.

#### **4.2.1 A Scottish policy perspective**

As discussed in Chapter 3, the *Sex Discrimination Act 1975* arose from the influence of the feminist movement. This Act, a UK-wide legislation, applicable in Scotland, and the working of the EOC (Equal Opportunities Commission) (later subsumed into the EHRC (Equality and Human Rights Commission), constituted in October 2007) led to a mandatory requirement to provide equal opportunities, including gender equality. Despite the legislative, mandatory requirement from 1975, local authorities in Scotland, in whose hands the governance: the authority, decision-making and accountability of education, sits, with decisions made locally, did not develop policy for gender equal opportunities until the 1990s. Furthermore, schools within the same regions developed

policies in different ways to try to address their context (Riddell, 2000). For example, Riddell (2000) noted that in one school in her study, serving an area with relatively high deprivation, that the public availability of examination data and consequent scrutiny of this data had marginalised and reduced the work on equal opportunities. Later, in their review, Condie *et al.* (2006), primarily gathering evidence from local authorities about strategies to address gender inequalities, found local authorities had an expectation that schools would have policies in place regarding equal opportunities related to gender but these did not appear to be available when considering the feedback from schools themselves.

The advent of devolution<sup>16</sup> through the *Scotland Act 1998* (UK Parliament, 1998a), saw a shift in the political landscape in Scotland. Although the education system in Scotland had long been the sole province of the Scottish legislature since the passing of the *Scotland Act of 1872*, with Scotland having jurisdiction over education (not the UK Government), devolution gave Scotland more powers and responsibilities. This led to Scotland, in essence, being under the auspices of two governments in some areas of legislation: equality being one of them. In the case of equality, the UK Government has overall responsibility for equality issues with the EHRC sited in London, but with the Scottish Government having responsibility for implementing policy. The *Scotland Act 1998* clearly set out the definition of equal opportunities<sup>17</sup> and enshrined in the Act the duty of the Scottish Parliament to ensure the principles and practice of equal opportunities are met (UK Parliament, 1998a). Furthermore, The Scottish Parliament, through their duty as the elected government, have a responsibility to ensure that the Scottish public authorities are adhering to all aspects of the Act including equal opportunities (UK Parliament, 1998b). For ‘equality’ policy there is a Scottish policy programme: the Scotland Business Plan (EHRC, online a). There is a Scotland Committee (EHRC, online b) that works with the Scottish Government and local authorities in Scotland to improve the quality of outcomes and to “promote fairness and equality of opportunity in Great Britain’s future economy” (EHRC, 2015: 6) – one of the key strategic priorities of their business plan.

In 2000, the Scottish Parliament passed the *Standards in Scotland's Schools etc. Act 2000*

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<sup>16</sup> Devolution: Scottish governance was constituted in 1999 with a new Scottish Parliament being formed – initially given the title Scottish Executive which was later changed to the Scottish Government.

<sup>17</sup> the prevention, elimination or regulation of discrimination between persons on grounds of sex or marital status, on racial grounds, or on grounds of disability, age, sexual orientation, language or social origin, or of other personal attributes, including beliefs or opinions, such as religious beliefs or political opinions (UK Parliament, 1998b: L2).

(Scottish Parliament, 2000a), which set out the mandate for five National Priorities, defined later in 2000 (Scottish Parliament, 2000b). The two relevant Priorities for this discussion are National Priority 1: Achievement and Attainment and National Priority 3: Inclusion and Equality.

National Priority 1 has a focus on “raising standards of educational attainment for all” and achieving “better levels in national measures ... including examination results” (Scottish Executive, 2003: 12), and the aim of National Priority 3 is “to promote equality and help every pupil benefit from education ...” (Scottish Executive, 2003: 32). The Scottish Executive (2003) goes into more detail about each of the National Priorities. There is mention in these detailed descriptors of the difference in attainment between boys and girls within National Priority 1 on achievement and attainment. However, despite the *Scotland Act 1998* highlighting the mandatory requirement for due regard to be given to equality in relation to gender, gender was not highlighted in the description of National Priority 3 for inclusion and equality. This reinforces the point made by Skelton (2007) that working to ensure equal opportunities for pupils in relation to gender did not have a profile but was embedded in the concept of ‘diversity’. The focus on gender in the National Priorities appears only to be the difference in educational attainment between boys and girls mentioned in National Priority 1.

To support and monitor the progress towards realising the National Priorities, performance measures and quality indicators arose from the National Priorities to give more information about school improvement than was available from using quantitative data alone. However, there was no mention of gender equality in these additional evaluative measures. The data arising from information gathered about the National Priorities was included in the data provided for schools by Scottish Government through ScotXed.

The development of the National Priorities in 2002 provided an improvement framework that supported schools in improvement planning and target setting, and the report published by the Scottish Executive (2003) gave progress on the introduction of the National Priorities in 2002. In that report, the local authorities were obliged to set out how they would “encourage equal opportunities” (Scottish Executive, 2003: 6). Some authorities were found to be auditing practice and others had developed frameworks to monitor the “promotion of equality” (Scottish Executive, 2003: 40) with specific reference to gender. HMIE were also given responsibility for carrying out a review of how schools were taking forward the National Priorities and this was published in 2005 ((HMIE, 2005).

It is worthy of note that the only mention of gender and attainment in the report was in reporting on 5-14<sup>18</sup> data, not on gender in respect of external examinations in senior school years.

In 2002, the National Debate in Scotland (Scottish Executive, 2002) was initiated which led to the development of *Curriculum for Excellence* (Scottish Government, 2008b). This saw a shift away, in policy terms, from the National Priorities to an outcome focused curriculum (MacPherson and Bond, 2009).

In 2006, the *Equality Act 2006* (UK Parliament, 2006) was passed by the UK Government and this gave rise to the UK *Gender Equality Duty (GED) (2007)* (EOC, 2007). This was constituted to improve the experiences for men and women by tackling gender inequality and put certain duties on public bodies. The *Gender Equality Duty Code of Practice for Scotland* published in 2007 (EOC Scotland, 2007) explained the benefits and obligations of the gender equality duty. The GED imposed specific duties on local authorities in Scotland to ensure the promotion of equal opportunities in their schools in relation to gender, and also required local authorities to have clear actions to promote equality between boys and girls, with monitoring procedures in place to measure impact, and for schools to report on progress in this area (EOC Scotland, 2007: 49).<sup>19</sup> In practice this placed a duty on each local authority in Scotland to report annually on how gender equality was being addressed and, on a three-yearly basis, to report on progress made in this area. This annual publication was expected to outline policy and practice in schools: notably on comparisons between boys' and girls' performance; difference between the exclusion rates of boys compared to girls; gender preference in relation to subject choice; and work experience

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<sup>18</sup> 5 to 14: a national curricular framework for primary and the first two years of secondary schooling began to be implemented in 1991, later replaced by *Curriculum for Excellence*. There was national testing using 5 to 14 in reading, writing and mathematics at key stages throughout primary and up to and including S2 in secondary school for every pupil. This attainment data was collected nationally (Harlen, 1996).

<sup>19</sup> GED Code of Practice 3.94  
make arrangements for each school to:

- gather information on the effect of its policies and practices in relation to the extent to which they promote equality between male and female pupils;
- assess the impact of its policies and practices, or the likely impact of its proposed policies and practices, on equality between male and female pupils;
- provide the education authority with an annual report in respect of the information the school has gathered and the impact assessments it has conducted;
- carry out such steps which the education authority proposes to take toward the fulfilment of its general duty; and
- maintain a copy of the Scheme.

choices (Forde, 2008).

However, in relation to comparing boys' performance with that of girls' there are two issues. The first is that the performance is a comparator measure when considered in this way, not matched to a defined standard. As a consequence, one gender will always be seen as doing less well. This lends itself to problematising performance by gender. The second issue is that until there is more consideration of the individual's performance rather than cohorts of boys and cohorts of girls, gender will continue to be seen as a binary concept as discussed in Chapter 3.

In seeking how local authorities had responded to their duty of monitoring attainment by gender, an internet search was carried out. Only one Authority's Statement of Equality was accessible. This illustrated this authority's response to the *Equality Act 2006* in terms of gender. Other local authorities might have similar procedures but these were not found, including any for the local authority of School A. (There was a raising attainment strategy for School A's local authority but there was no mention in this strategy of the gap in attainment between boys and girls or gender equality, nor was there a policy on equality, as far as could be determined at the time of the search). For the purposes of this study the statement accessed did highlight that this Council recognised their duty in responding to the *Equality Act* with a commitment to providing "equality of opportunity for all, irrespective of gender ..." (East Ayrshire Council, 2007: Appendix 1). There was a clear statement that schools' policies should reflect the principles of the *Equality Act*, for example monitoring progress, including attainment against gender, but also to ensure the curriculum avoided stereotyping, as well as providing opportunities for staff training in such areas as gender.

This local authority demonstrated their responsibility to produce a Gender Equality Scheme and included a review every three years. They also required each school to comply with the legislation in the *Equality Act* by implementing the Scheme, with the responsibility for this lying with the head teacher. Impact of the Scheme had a high profile, with monitoring being mandatory to allow strategies to be reviewed. Monitoring, including analysis of data on attainment by gender, to check the progress made by the school and on actions taken to reduce barriers that could be attributed to gender, would allow further areas for development to be identified. There was no specific detail about how this data should be broken down, for example by SIMD or levels.

At a national level, in response to the *Equality Act 2006* and the GED, a gender equality toolkit (Scottish Executive, 2007) was produced. The toolkit gave practical advice to schools and educators about how to realise equality. (Other areas were also highlighted where there was a need to address equality issues, for example the pay gap between men and women to the detriment of women (Arnot and Phipps, 2003).)

In terms of the attainment agenda, the toolkit referred to the review carried out by Condie *et al.* (2006), commissioned by Scottish Government, to support schools in their thinking, which is discussed in more depth in Chapter 5. The gender equality toolkit also offered support to schools in the form of quality indicators based on *How Good Is our School?* (HMIE, 2007) to give a starting point for schools on the journey of improvement in addressing gender issues. Reference was made in the toolkit to *Quality Indicator 1.1 Improvements in Performance* (HMIE, 2007: 6) and to which boys and which girls but did not go into detail about the difference between boys' and girls' attainment due to other factors such as class or ability groupings, as in this study. The priority of evaluating and acting on areas for improvement was built into planning for improvement (*Quality Indicator 6.3*) (HMIE, 2007: 21) where the expectation was that data by gender would be scrutinised and actions taken.

The Scottish Government (2008a) as a sequitur to the GED, recognising that gender inequality had not been eliminated, published the *Gender Equality Scheme 2008-2011*

to ensure that the frameworks and the policies which we develop remove barriers and challenge the attitudes and behaviours that prevent gender equality in Scotland (Scottish Government, 2008a: 1).

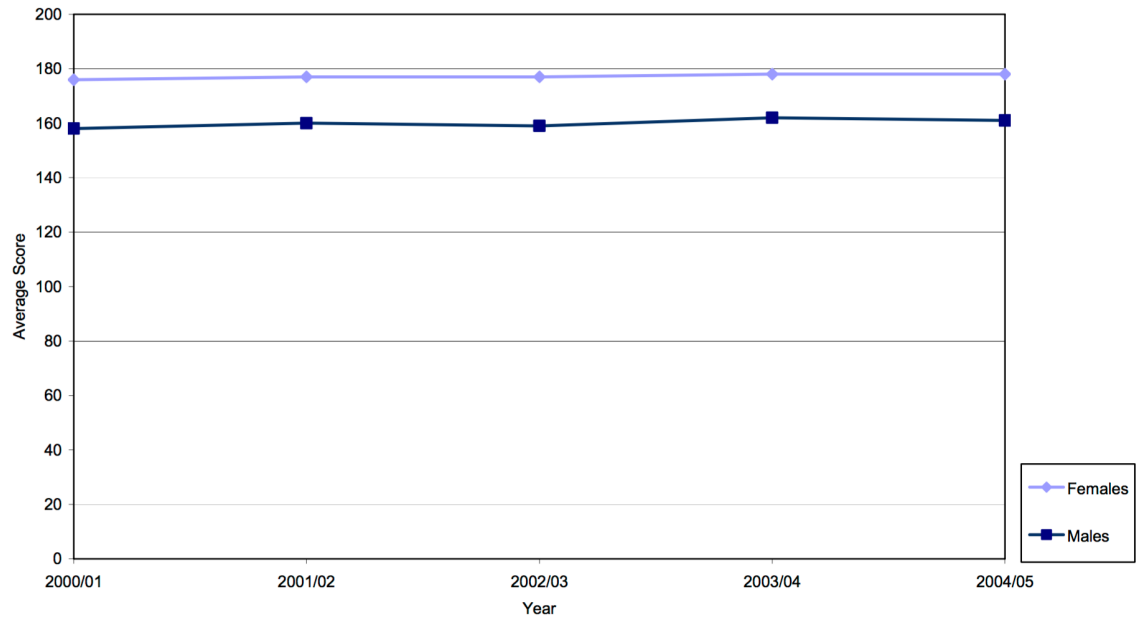
The aim of the scheme was to integrate equality into the day-to-day work of Scottish Government with an expectation that there would be an annual report produced by Scottish Government on progress towards gender equality. Education from the perspective of attainment was considered in the *Gender Equality Scheme* with a commitment to improve attainment for all, including seeking reasons for boys not performing as well as girls, but there was no differentiation within groups of boys or groups of girls. It is important to point out that the Scheme did not lose sight of the issue of girls, for example raising the point that some girls do not necessarily move into careers that match their qualifications.

The document highlighted the difference in attainment and showed that girls outperformed boys at all levels in S4 to S6 based on 2004/05 data from SQA examinations. This is



illustrated in Fig 4.1, which shows a graph of national average tariff scores<sup>20</sup> for boys and girls in S4 for four consecutive years and shows that the girls consistently outperformed boys by a tariff score of approximately 20. The graph shows little change in this difference or a shift in tariff scores over the four years illustrated.

**Fig 4.1: Average tariff scores of S4 pupils, by gender, Scotland, 2000/01 to 2004/05**

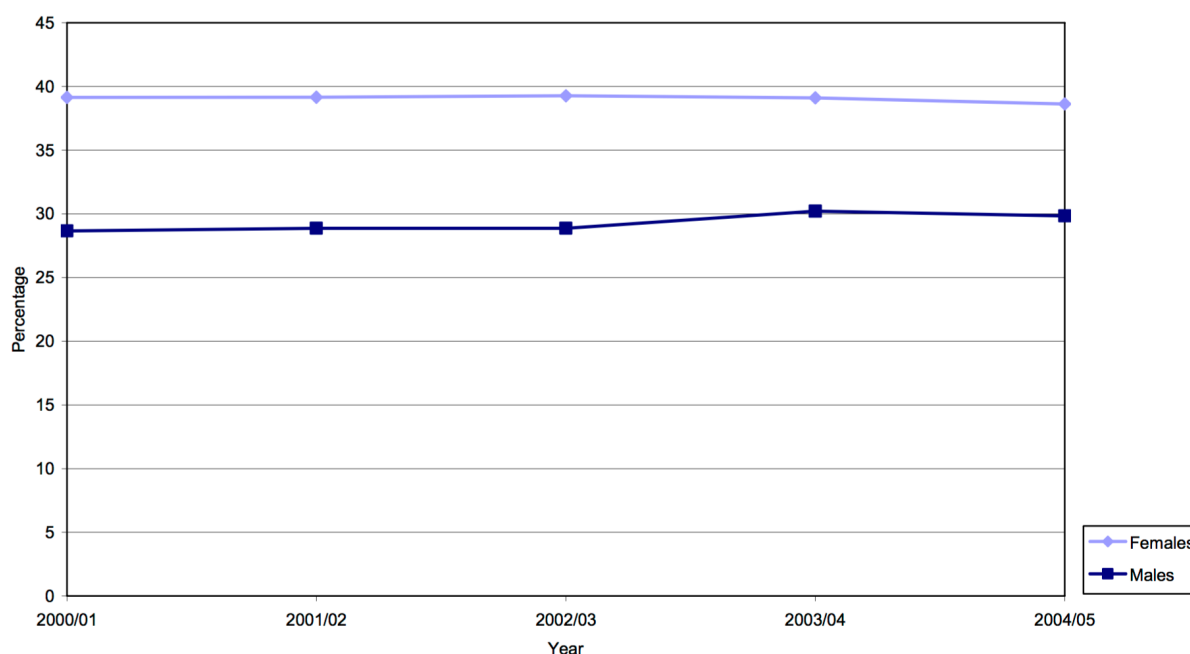


(Scottish Executive, 2006: 128)

Fig 4.2 illustrates the difference nationally at ‘5+ Level 5’, the most demanding level of examinations in S4 and is a proxy measure for those pupils who are high attaining or who have the potential to be high attaining.

<sup>20</sup> The tariff scores are the total points gained in external examinations to date, in this case by the end of S4. The average score is the average for all the girls’ scores and all the boys’ scores.

**Fig 4.2: Pupils in S4 gaining 5+ Awards at SCQF Level 5, by gender, Scotland, 2000/01 to 2004/05**



(Scottish Executive, 2006: 124)

In this graph, the percentages in 2004/05 show that 39% of females compared to 30% of males gained ‘5+ Level 5’ and this was a consistent pattern during the period illustrated, and is a larger relative difference than for the whole cohort as shown in Fig 4.1.

The graphs serve to illustrate the differences found and were used by the Scottish Government to highlight the issue. They also show that the issue found in School A was not an isolated case but one that was apparent nationally.

The Scheme provided a gender equality action plan with a focus on addressing gender inequality in attainment. The action for Scottish Government was to ensure that all schools had data provided by ScotXed (Scottish Government, 2008a: 64) to highlight the difference in levels of attainment by gender. There was no focus on which boys or which girls: seeing girls and boys as homogeneous groups despite the statistical evidence as illustrated above. The rationale for providing this data was to give schools information to identify and provide interventions to maximise pupils’ attainment to allow ambition to be fulfilled. The Scottish Government commissioned the review by Condie *et al.* (2006) about the time of the publication of this scheme, to find reasons for boys’ apparent underachievement and suggest strategies that schools could adopt.

Despite this vision of the *Gender Equality Scheme*, the reporting of progress towards

reducing differences in attainment by gender, as required by the scheme, appeared limited, as far as can be determined. The *Equality outcomes and mainstreaming report 2015* (Scottish Government, 2015a) made no mention of differences in attainment by gender. The focus appeared to have shifted to a “focus on reducing inequity in educational outcomes for all learners” (Scottish Government, 2015a: 24). It is important to have this fine-grained data to be able to make interventions.

In 2010 a new *Equality Act* (UK Parliament, 2010) was passed by the UK Government, to be legislated throughout the UK, including Scotland, which brought together all the previous and various pieces of legislation on equality and human rights, including the *Sex Discrimination Act 1975*, into one Act that “provides a legal framework to protect the rights of individuals and advance equality of opportunity for all” (EHRC, online c), enshrining in law equal opportunities in the UK in relation to gender in educational provision. However, on examining the guidance for local authorities from EHRC (EHRC, 2012, 2014), there was no mention of the aim of promoting equity for boys and girls in their educational provision and outcomes.

Each year since 2011, the Scottish Government has produced a statistical bulletin (Scottish Government, 2011) for public consumption giving summary statistics for attainment, leaver destinations and school meals. The statistics on attainment by gender are for the whole cohort with no intersectionality with class/SIMD. The latest publication accessed on attainment and leaver destinations, using data from 2013/14 National Qualifications (Scottish Government, 2015b), does show differences in male and female performance, favouring girls, but only using measures of one or more qualification at SCQF level 5, and one or more qualifications at level 6 (Scottish Government, 2015b). The data does not give a picture of the significant differences seen when examining statistics of the higher levels of ability (Scottish Government, 2015b: 15) as defined in this study. The last set of statistics that could be found related to reporting on equality trends by gender by higher ability was published in 2006 (Scottish Executive, 2006) and this illustrated the difference at ‘5+ Level 5’ (Scottish Executive, 2006: 52) but was limited in the information given about different groupings.

From the exploration of the legislation/policy landscape related to Scotland, there has clearly been intent to address equality in an educational context, from the *Sex Discrimination Act* in 1975 through to the *Equality Acts* of 2006 and 2010, with the associated *Gender Equality Duty* and toolkit, and subsequently the *Gender Equality*

*Scheme*. This is within the context of a two-tier system of government: the UK government and the devolved government in Scotland, in which education is the responsibility of Scottish Government and equality the overall responsibility of the UK Government. Forbes *et al.* (2011) suggest that, because of this two-tier system of governance for equality, controlled by the UK Government but enacted by the Scottish Government, there has been a lack of importance placed on gender equality in Scottish education policy and practice. Another important point made by Forbes *et al.* is that subsuming the Equal Opportunities Commission into the Equality and Human Rights Commission, which encompasses all categories of difference that could be causing “disadvantage” (Government Equalities Office 2010: 3, cited in Forbes *et al.*, 2011), appeared to lose the specific focus on gender. On examination of the Business Plan published by the EHRC for 2015/16 (EHRC, 2015) (with the Scotland plan now appearing to be subsumed into the plan for the UK), there is no reference to gender inequality or inequity in terms of attainment within the educational context, as far as can be determined. It would also appear that this is despite the latest review for 2013/14 highlighting that gender stereotyping in education does exist (EHRC, online d: 13).

In terms of the response by Scottish Government and HMIE, gender is touched on when discussing academic attainment, for example with reference to the policy on *Curriculum for Excellence* (Scottish Government, 2008b), and the HMIE (2009) publication *Improving Scottish Education*. In this document, gender linked to attainment is mentioned twice: in attainment by gender in primary schools, and strategies to improve academic outcomes. HMIE also give some advice on gender on their website *Journey to Excellence* (Education Scotland, online a) but this takes an essentialist view with a focus on boys and girls being different from a physiological stance, with no consideration given to gender construction or gender identity. Education Scotland did produce a report following the *Equality Act 2010* “to support schools and centres in promoting diversity and equality through all aspects of planned learning” (Education Scotland, online b: 1) and gave some examples of good practice seen in schools: staff training on equality to developing “responsible views of gender” (p. 8); and teachers challenging gender stereotyping through learning experiences in the classroom. There is one mention of attainment as Education Scotland poses the question to schools about how they aim to ensure that gender is not a barrier to pupils participating and achieving (p. 24).

The mandate to report on equality outcomes nationally is enshrined in legislation. At the

time of writing this is manifest at national level in an annual report *The Equality and Mainstreaming Report*, but this makes no reference to gendered patterns of attainment. The focus in this report is on reducing inequity in educational outcomes for all. Examination of the educational policies in Scotland reveals that gender or other forms of diversity appear less dominant than the focus on the individual child with the aim of ensuring the same opportunities for all children and young people regardless of background (Scottish Government, 2016). The dominance of ‘individual needs’ reinforces notions of generalised ability and overlooks structural social barriers such as gender (Forbes *et al.*, 2011) that can limit attainment.

This shift from a focus on addressing gender issues to inclusion began as early as 1997 in the UK. There was a shift in the political landscape in the UK in the 1990s. Before the mid 1990s, under ‘old’ Labour Government, the social policy focus had been on gender in terms of equality where gender stereotypes and gender related issues were included in teacher training programmes, and raising awareness about these issues was included by some teachers within the curriculum taught in their classrooms. From about 1997, under New Labour, this had moved to a *diversity* and *inclusion* agenda and the issue of gender was downplayed. Neither in the case of diversity nor inclusion was initial teacher education mandated to focus on the interplay of gender in terms of power and difference. Instead the focus on gender was on more male teacher recruitment (Skelton 2007). Riddell and Tett (2006), in their Scottish study on the teaching profession in Scotland, describe a similar scenario with a focus on gender balance amongst teachers. This focus on the gender balance was as a result of the *Scotland Act 1998*. In a sense this diluted the very real and important necessary interventions required to develop gender equity of opportunities and outcomes. This lack of gender related policy in Scotland signals to practitioners that although gender issues exist they are not important (Forbes *et al.*, 2011), and this raises the concern of the likelihood of little action on gender in education (Forbes *et al.*, 2011).

This lack of response to gender related issues in Scotland is in contrast to the response in Sweden. Both are small countries in the European Union (EU) and are under the advice of the EU. Sweden has a devolved model of governance with responsibility for education being with the local authorities and the teaching profession. Similarly, although Scotland is part of the UK, education is devolved to the Scottish Government with the *governance* of education lying with local authorities as mentioned earlier.

Considering gender, policy and governance, in Sweden gender has a profile in educational

policy terms. This is against a backdrop of success of the feminist movement in Sweden to give women opportunities previously denied, for example in the labour market and in politics. Although Sweden followed the pattern of response to gender related attainment issues by considering how to address the ‘problem’ of boys, there was a commitment to take a poststructural stance in the national curriculum by introducing opportunities to understand the construction of gender, and seeing the curriculum as the vehicle of transforming thinking through education (Forbes *et al.*, 2011). However, Forbes *et al.* note a move in Sweden to change to a more universal approach with gender being combined with other factors, for example ethnicity and disability. Although Forbes *et al.* argue that Sweden has been progressive in policy terms with gender specific policies, there is a danger that with this move away from gender having a specific focus, gender issues could be marginalised as they assert has happened in the UK and Scotland. Furthermore, Forbes *et al.* claim that the lesser social feminist capital in Scotland has resulted in less influence to bring about change regarding gender. Forbes *et al.* (2001: 771-2) suggest that Scotland has largely ignored gender related policy, going so far as to say that gender has been viewed “with suspicion – as a distracting or uninteresting issue”, with the emphasis not being on “discourses and practices, producing the symbolic figure of the un-gendered child”.

This lack of importance placed on gender is manifest in the response of local authorities. The mandate for local authorities was clear, both to develop policy, to plan, and to report on strategies and outcomes to meet the gender equity agenda. In terms of the local authorities, as far as could be determined, they either did not act on this mandate or did not give it the profile expected in the legislation. This may have been due to the perceived greater need of addressing other factors, for example, deprivation issues (Riddell 2000). HMIE also had a duty to respond to the legislation in respect of the National Priorities, but their response focused on 5-14 and not the gender patterns of attainment by different ability groups in external examinations, although the National Priorities themselves, the Scottish Government drivers, were limited in their focus on the intersectionality between gender, attainment to other factors, such as socio-economic indicators.

This review has shown that the policy and legislation does seek to address the issues of gender inequity but from a simplistic stance with no finesse around the different groupings of boys and girls, and there is no mention of gender discourses as postulated by the poststructuralist movement. There appears to be a continued focus on gender polarity, seeing boys and girls as homogeneous groups. and also not considering different groups of

boys and girls as in this study, despite the real evidence used by the Scottish Government in the *Gender Equality Scheme* to highlight the difference, shown in Fig 4.2. In all of the literature examined in this area there was a focus not on which boys or which girls or on individual boys or girls but on all boys and all girls, both in absolute terms and in relative terms. To continue to take this essentialist stance by gender is to perpetuate gender as a binary concept. Forbes *et al.* reinforce this, citing Riddell (2007, cited in Forbes *et al.*, 2011) who observed that the focus is not on equality of opportunity for both boys and girls but rather on the problems associated with boys. This, as she points out, is problematising boys at the expense of girls and reinforces the essentialist stance of duality of gender.

This review of policy would also suggest that despite the strong focus on equal opportunities throughout the years including legislating several policies to address the issues, and the commitment, in policy and in terms of legislation, to impact positively on gender equity, little real progress has been made towards understanding inequalities or having a consistency of effort to remove barriers. There has been little or no improvement in the gap between boys' and girls' performance based on external examination results, neither overall attainment nor within specific groups of boys or girls, including the most able. In the most recent reports by Scottish Government attainment by gender is no longer reported on.

This section has considered the legislative and policy context related to gender and attainment. The next section considers the research evidence on gender and attainment supported by statistics.

#### **4.2.2 The research findings of policy impact in Scotland**

Comprehensive education was introduced into Scotland from 1965 laid down in the *Scottish Education Department Circular 600* (Paterson, 2003). Comprehensive education did not aim to address gender inequalities but did give more educational opportunities for all than had been possible before this date. Previously there had not been the same opportunities for girls, for example able girls seeking to move on to a senior secondary school. Before 1965 if pupils wanted to sit external examinations at the end of their school career they were required to sit an entrance examination at twelve years of age for a senior secondary school.<sup>21</sup> Gipps and Murphy (1994) found in the UK (not Scotland) that to

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<sup>21</sup> In Scotland there was a two-track system until 1965. The junior secondary school provided three years of general education on leaving primary school with pupils leaving school at the age of 15. Access to the senior

ensure enough boys entered Grammar School, the pass rate was lowered for boys<sup>22</sup>. It was alleged that this was to achieve similar proportions of boys and girls in the grammar school system. There was a suggestion that this may also have been true at the same time in Scotland (Croxford *et al.*, 2003). This reinforces the notion of the gender difference in performance between boys and girls not being a ‘new’ phenomenon as claimed in the 1990s by those who saw the crisis of masculinity as a result of feminist activism and the focus on girls’ education.

From 1973, the improvement in performance of girls increased more rapidly than boys, within a picture of overall attainment increasing for all. Two important policy changes in Scotland happened from about the mid-eighties. One was the ‘improving schools’ agenda with a strong focus on particularly raising attainment, and second the introduction of the *Education (Scotland) Act 1981* (UK Parliament, 1981). This Act gave parents choice over schooling and required schools to publish attainment data (Croxford, 2009). This then meant that schools had an imperative to track and monitor progress, to ensure pupil performance in SQA examinations was maximised. The evidence from Scottish national quantitative data, provided by SQA, showed that there was a difference in levels of performance of boys and girls, favouring girls (Croxford, 1999; Tinklin *et al.*, 2001). From 1970 attainment overall was improving but the gap between boys’ and girls’ performance remained. UK-wide data also show that there is a difference in levels of performance of boys and girls (Croxford *et al.*, 2003).

Several reports were commissioned by the Scottish Executive and the Scottish Government to examine the phenomenon. Tinklin (2000) was commissioned by the Scottish Executive Education Department to consider high attaining females using the data (1990 – 1997) from the Scottish School Leavers Survey<sup>23</sup> (SSLS). She used those achieving four or more Highers on leaving school. The reason she gave for this choice was that selecting four or more gave a group to be investigated that was not just working at a minimum level (three or more is considered a minimum entry for university) but those who had higher

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secondary, selected by the local authorities gave pupils opportunities to gain qualification and entrance to university (Murphy, 2015).

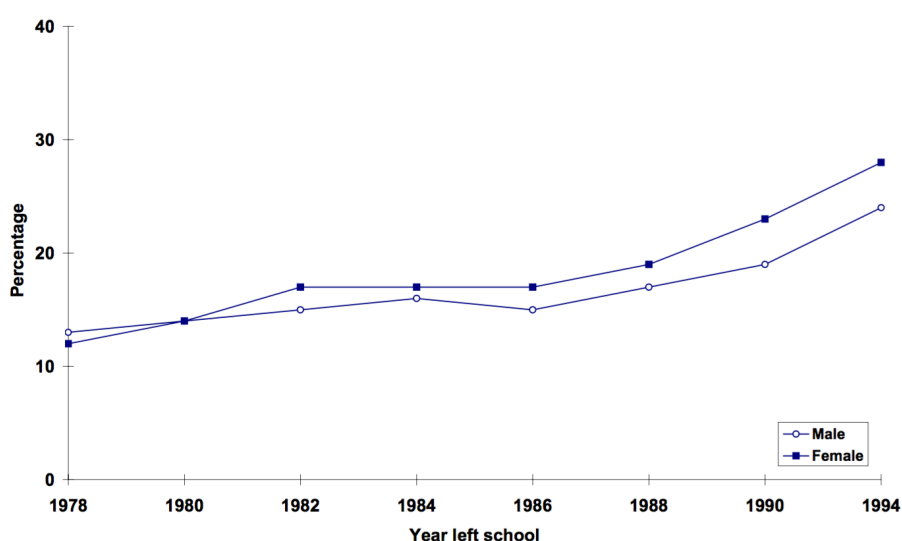
<sup>22</sup> For example, Gipps and Murphy point out that some decision makers believed, ‘the best approach is to treat the sexes as if they have equal potential and to adjust the cut-off scores to achieve the admission of equal numbers or equivalent proportions of each sex (p. 89)’ (Linn, 1995: 347).

<sup>23</sup> Survey carried out in Scotland from 1970s until 2010 when it was subsumed into the Summary Bulletin, for example *Summary statistics for attainment, leavers destinations and school meals, No.1: 2011 Edition*. This supplementary data is available at Scottish Government (online f).



performance levels, and so were demonstrating higher ability. This also gave a sample size that would allow for better analysis (Tinklin, 2000: 2). This is illustrated in Fig 4.3, although Tinklin did stress that the statistical significance of the difference was only computed for 1990 and 1994. She showed that there was a strong correlation between high attainment and social advantage or privilege, and showed that middle-class girls outperformed middle-class boys. Although the data gives an indicator of differences in attainment between boys and girls at this level of difficulty, there is an inadequacy in that this is only one measure that has been used to identify or confirm a problem and does not consider other data. It should also be pointed out that the SSLS as a source of data is not robust and is subject to error and non-response as it relied on a voluntary return to a request for information from school leavers (Croxford *et al.*, 2003).

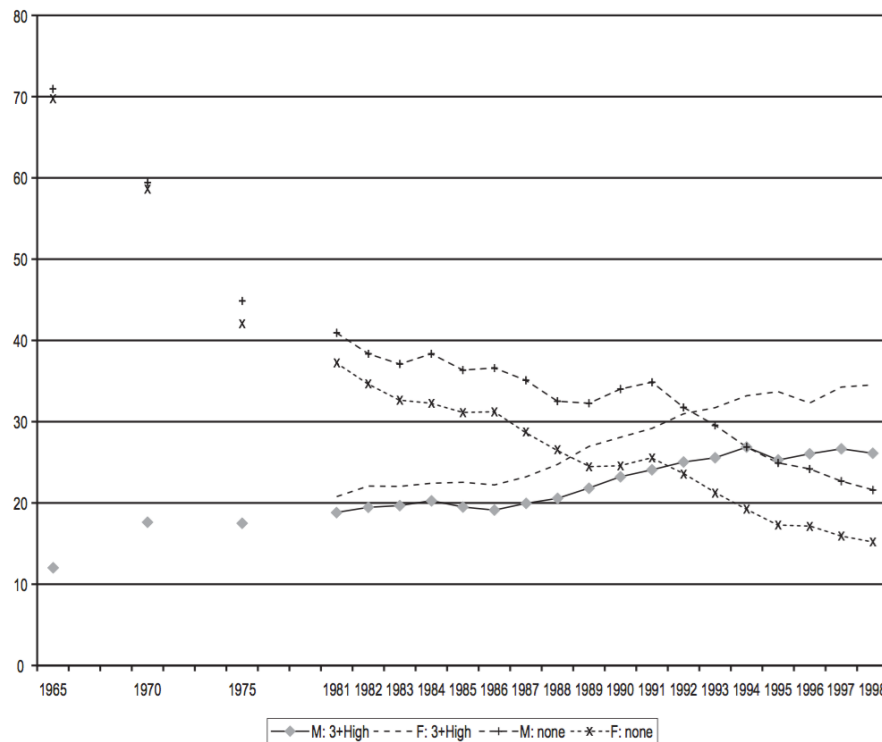
**Fig 4.3: Percentage of school leavers with 4+ Highers passes by gender**



(Tinklin, 2000: 5; reproduced with the permission of the Centre for Educational Sociology, University of Edinburgh)

Another review carried out in Scotland by Croxford *et al.* (2003), commissioned by the Scottish Executive, used data gathered from 1965 to 1998 - although the data prior to 1981 was not as comprehensive, because data for every year before 1981 was not available, and so no trends could be drawn from this data. The data for those who achieved three or more Highers (the high attaining group as defined by Croxford *et al.*, 2003) showed that the percentage of school leavers with this level of qualification rose throughout the period. There were slightly more boys than girls before 1981 but this changed from 1981 onwards with the gap widening between boys' and girls' performance until by 1998 35% of girls and only 26% of boys achieved this level of award as shown in Fig 4.4.

**Fig 4.4: Trends in highest % levels of attainment of Scottish school leavers by gender: 1965-98**



(Croxford *et al.*, 2003: 137; reproduced with the permission of Linda Croxford)

(Note: M:3+ and F:3+ are the % of males and females respectively gaining 3+ Highers pertinent to this study (M: none and F: none are the % of males and females who gained no awards at O Grade/S Grade grades A-C/1-3))

Croxford *et al.*'s analysis also showed that boys who performed well at Standard Grade, achieving Credit level passes, achieved marginally more Higher passes than girls by the end of S6, suggesting that the boys had made more progress across the two years.

The table below from Croxford *et al.*'s work illustrates the difference in attainment amongst the more academically able pupils in S4 in 1999 at Standard Grade. The gender difference in performance was most marked at the most demanding level of study, at Credit level, which echoes the findings in School A, discussed in Chapter 2.

**Table 4.1: Percentages of S4 males and females gaining five or more Standard Grade awards in 1999**

<b>Level of Standard Grade awards</b>	<b>Males</b>	<b>Females</b>	<b>Difference in favour of females</b>
1–2 (Credit)	29	40	+11
1–4 (General or Credit)	73	81	+8
1–6 (Foundation, General or Credit)	92	94	+2

(Croxford *et al.*, 2003: 138; reproduced with the permission of Linda Croxford)

The pattern by class and gender was also examined. Although there was no nationally available data to differentiate by gender and by social class, Croxford *et al.* used data gathered from young people about parental occupation to look for trends by class and gender using the SSLS data as Tinklin (2000) had done. (Croxford *et al.* did make clear that the data used did offer an opportunity to examine the impact of social class but was subject to “measurement errors and potential non-response bias” (p. 45)).

This data showed that for all but the unskilled there was a difference in attainment favouring girls. Croxford *et al.* also found that this pattern of girls achieving more highly than boys began in early years and was evident throughout primary and secondary. Although this paper by Croxford *et al.* was using average performances of boys and girls, she did emphasise that using only average attainment data concealed those boys who were doing well and conversely girls who were not and stressed it was important not to see boys and girls as homogeneous groups. Collins *et al.* (2000) suggested the use of the expression the ‘gender jigsaw’ rather than the gender gap to avoid perpetuating the belief of the homogeneity of boys and girls and using data “to piece together the patterns of the gender jigsaw” (Collins *et al.*, 2000: 62).

In a later review Croxford (2009), again commissioned by the Scottish Government, this time covering the period 1985 to 2005, extended the information about how attainment by gender had changed. As in her review of 2003, she gathered data from young people about parental occupation to look for trends by class and gender.

Her data showed that at age 16, using an average score for Standard Grades, girls

outperformed boys in all social classes and this had been a trend from 1984 until 2002; and was similar at age 18, using average UCAS tariff score (UCAS, online). Data from 1987 till 2002 revealed the same trend but the data did show a larger gap between girls and boys from the 'managerial' and 'intermediate' classes than the 'working' and 'unclassified' classes, and this gap widened from 2001 to 2005 (Croxford, 2009: 37).

Croxford (2009) also highlighted that the difference in attainment by gender was less than the difference in attainment by social class difference, comparing those young people with no social disadvantage to those living with social disadvantage due to socio-economic circumstances. She suggested that this gap was highlighted less because there were no statistics of performance by social class or deprivation index. This way of gathering data, using SSLS, was no longer used by the Scottish Government after 2005. This challenged the ability to examine the intersectionality of performance by gender and by class. As explained earlier, the SSLS data was reliant on completion of questionnaires by school leavers, who did not all respond, and by 2002 the cohort responding had fallen to 45% of the total cohort, which could have skewed the data. For example, it was found that those living with disadvantage and males were less likely to respond. However, although this data set collection was discontinued in 2005, *Insight* was introduced in August 2013 (Scottish Government, online b). This is able to display performance by SIMD but does not provide the detail of gender differences of males and females by SIMD (ScotXed, online b).

Finally, MacPherson and Bond's (2009) review, funded by the EHRC, also found that the differences in attainment between boys and girls, favouring girls, were evident in Scotland and the UK. The years studied by MacPherson and Bond were 2004/05 to 2006/07. The difference was most marked at the 5+ awards at SCQF level 5 with the difference between males and females at the 5+ Level 5 being between 7.8% and 8.8% for the three years. This is shown in the table below.

**Table 4.2: S4 pupils achieving Standard Grades by gender, 2004/05-2006/07**

Year	Percentage of the S4 group achieving:			
	English and Maths at SCQF Level 3 or better	5+ Awards at SCQF Level 3 or better	5+ Awards at SCQF Level 4 or better	5+ Awards at SCQF Level 5 or better
<b>2004/05</b>				
Total	90.5	90.2	76.1	34.2
Male	89.8	89.2	73.1	29.8
Female	91.2	91.3	79.2	38.6
<b>2005/06</b>				
Total	91.2	90.7	76.8	34.8
Male	90.5	89.6	73.8	30.5
Female	91.9	91.9	79.9	39.2
<b>2006/07</b>				
Total	91.5	90.6	75.6	33.1
Male	90.9	89.7	72.9	29.2
Female	92.1	91.6	78.4	37.0

*Notes:* SCQF Level 3 is equivalent to Standard Grade Foundation; SCQF Level 4 is equivalent to Standard Grade General and SCQF Level 5 is equivalent to Standard Grade Credit.

*Source:* Scottish Government (2008e) Table 2.

(Macpherson and Bond, 2009: 47)

A similar trend was shown in the *Equality Outcomes Gender Evidence Review* carried out on behalf of the Scottish Government (Scottish Government, 2013) for the demanding levels of study in S5 and S6. For example, in 2004/05 in S5 11% of girls and 8% of boys achieved 5+ Higher awards.

The data and research examined as part of this review, demonstrates the limited scope of interrogating specific groups of pupils and particularly, as is the case of the specific sample in this study, those in the academically able advantaged group.

### **4.3 Gendered pattern of attainment – UK**

A similar picture emerged in the UK. The equality review carried out in the UK highlighted the need for ‘fairness’ with an emphasis on equality: “an equal society recognises people’s different needs, situations and goals and removes the barriers that limit what people can do and can be” (Equalities Review, 2007: 6). Inequality in the review was defined by the gap - difference rather than an absolute value. This is an important and necessary distinction because the attainment of both groups could rise but the difference

could remain at the same level. However, as stated earlier it is worth noting that there is no defined standard and there is always likely to be a differential. The *Equality Review* raised the issue of differences in educational attainment with the aspiration of reducing this. The focus in this Review was on young people living with disadvantage. The report cited evidence from England of the lower attainment of boys relative to girls, particularly in English (Reading and Writing at Key Stage 1). However, despite this evidence there was no enquiry in the Equality Review about how this differs by class/socio-economic indicators/level of advantage.

A UK-wide review, *How fair is Britain?* (EHRC, 2011) showed there was a difference in attainment in favour of girls in all of the three countries: England, Scotland and Wales and according to their analysis this has been the case since 1945. Comparing the three countries the gap was less for Scotland than either of the other two countries: 50% of girls compared to 46% of boys (EHRC, 2011: 328)<sup>24</sup>. The focus was mainly on the more academically able achieving at level 5 rather than all boys and all girls. The two areas of focus were Standard Grade awards at levels 1-3 (levels 1 and 2 are equivalent to SCQF level 5) and Intermediate 2 at grades A-C (equivalent to level 5) at age 16. These findings were echoed by Machin *et al.* (2013) in their review about Scottish devolution and education, where the focus was on comparing performance of 18-year-olds at Higher or equivalent and also included data for Northern Ireland. However, Machin *et al.* did acknowledge the differences between Scotland's education system and that of the other countries, for example in England, Wales and Northern Ireland the curricula are similar and nationally prescribed, whereas in Scotland the policy for the curriculum is not prescribed and the curriculum is the responsibility of the local authorities and not central government.

Another study in the UK by Freeman (2004), which did look specifically at high ability 'gifted' pupils, stated that girls were outperforming boys in all subjects including the sciences where traditionally boys had performed better, looking specifically at the top grades. Also there were fewer failures amongst girls. She drew from data from national examinations: the 16 to 18 age range. Freeman highlighted the findings of Arnot *et al.* (1998) that this trend had been from the end of the 1980s.

Drawing from all the reports on attainment by gender considered in this section, there is a similar picture found in the rest of the UK as there is in Scotland: a trend in gender

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<sup>24</sup> England - 54% of girls: 47% of boys and Wales – 51% of girls: 43% of boys

difference in attainment that is most pronounced at the most demanding levels of study. There appears to have been little research carried out on the impact of advantage.

#### **4.4 International perspective: Gender: Attainment**

A study carried out by The Education, Audiovisual and Culture Executive Agency (Eurydice, 2010), using the reference year 2008/09, covered all Eurydice Network countries (in Europe). They advocated that due consideration should be given to gendered differences in attainment when formulating policy because of the evidence from the study. They found that most policies appeared to focus on disadvantage as a barrier with little focus on gender as a cause despite the evidence of patterns of attainment that were gender specific. The aim would be to remove gender stereotyping to develop inclusive practices. The study did show a general trend across Europe of girls achieving more highly amongst those aspiring to go on to University with the gap becoming larger with higher levels of study. However, the study did acknowledge that the average gendered pattern did not reveal the differences between some groups of boys and girls. It was emphasised that both boys and girls in the groups where there was disadvantage exhibited underachievement. There was an acknowledgement made by most countries that there were differences in attainment between boys and girls in different socioeconomic groupings but little attention was given to this difference in attainment. The most frequent response was to focus on boys' underachievement as a systemic trend. A few countries focused on actions to support both boys and girls. The policy responses ranged from non-response to problematising gender, and even when there was policy there was a lack of strategies to address inequalities in education. In some cases, there was 'gender-sensitive' advice but there was a lack of an overall national strategy. Gender-sensitive policy was strongly advocated by the European Union, not only efforts to promote equality but also specific interventions to help both boys and girls. It was stated that there was an expectation that governments, local authorities and schools would collect and analyse data of underachievement, including by gender when there were apparent differences.

The importance of analysing attainment by gender was also highlighted worldwide. PISA, as previously explained, is an assessment that examines the ability of a sample of 15-year-olds across the world in reading, mathematics and science, and some of the data is

categorised by gender.<sup>25</sup> The PISA data suggested that boys' underachievement was an international phenomenon (OECD, 2015). Further, for overall attainment across reading, mathematics, and science literacy girls outperformed boys in 70% of participating countries, including many with considerable gaps in economic and political equality, and they fell behind in only 4% of countries (Stoet and Geary, 2015). The report also suggested that the gender gap for reading, science, mathematics and problem-solving appeared to be the same for those living with disadvantage as advantage (OECD, 2015: 138). Stoet and Geary (2015) carried out a meta-analysis on boys' and girls' performance in Mathematics (based on extensive analysis of PISA data from across the world). They concluded that there was no link between narrowing the performance gap between boys and girls and equality policy. This raises the question about policy but also about different approaches to addressing the phenomenon.

#### **4.5 Accountability: gender and attainment**

Testing across the world through international assessments such as PISA and national assessment scrutiny of attainment data, for example SQA data (Scotland), is important to raise issues, and can and does lead to education policy being directed to improve standing in these tests such as PISA. This in turn can steer curricular and pedagogical changes. This can have a positive outcome but can also lead to teachers being driven by the demands of accountability (Lingard *et al.*, 2013). This is highlighted by Martino and Rezai-Rashti (2012) in their review of the attainment gap by gender in the Ontario context where the use of attainment data in the form of standardised testing was a “basis for the endorsement of particular truth claims about the gender achievement gap” and the policy decisions to address the gap (Martino and Rezai-Rashti (2012: 428). This included focusing on gender differences with an approach that cements the binary concept of gender, thus reinforcing the logic that there are essential differences between boys and girls. An issue using data alone linking gender to attainment, with the sole function of accountability, can lead to “the problems of quantitative research that fails to engage adequately with the substantive theoretical and empirical literature” (Connolly, 2008: 249).

Accountability that focuses almost exclusively on attainment data in the form explored in this chapter, can lead to a tendency to address the underachievement of one particular

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<sup>25</sup> Around half a million students in 65 economies (economies are defined rather than nations because China has several regions involved) take part in the PISA survey. This sample represents about 28 million 15-year-olds globally.



group over another. This appears to be the case for gender, which has been subsumed into an equality agenda that has diluted the importance of exploring gender and its link with attainment (Eurydice, 2010). The focus is now on those living with disadvantage (Equalities Review, 2007; Scottish Government, 2016). This has arisen because of the stark and concerning data between advantaged and disadvantaged pupils and is an increasing concern in Scotland. There is no suggestion that removing the barriers for this disadvantaged group should not be key priority.

There are three important points to make here. Firstly, that focusing on one particular group should not be at the exclusion of considering attainment and achievement by gender or any other focus of diversity. In the case of gender, there is evidence of gendered patterns of attainment that require investigation and, as such, policy, practice and evidence needed to bring about change. Secondly, there is a mutual exclusivity when focusing on one aspect, which does not acknowledge the complexity and the intersectionality of advantage/disadvantage/class with other aspects such as gender, race, ethnicity and disability. To continue to have one focus means that the education system will continue to fail some rather than addressing the needs of all. Finally, only considering the raw attainment data is a simplistic stance. As suggested by Stoet and Geary (2015) there are greater considerations than simply using the data. As a matter of importance consideration should be given to “value frameworks” (p. 149) to influence equal opportunities, amongst other aspects.

#### **4.6 Concluding remarks**

In summary, this review has considered relevant legislation and policy, and reports arising from the policy to support schools and local authorities in relation to gender and attainment, and the conclusion is that the ambition of both the UK and Scottish Governments is to reduce the gap in performance amongst boys and girls. The ideologies underpinning the policies relating to gender tend to see the gap as the boys’ gap with the focus on boys rather than the improvement in opportunities for both boys and girls. There has also been limited focus on high attaining pupils despite the evidence of the larger attainment differential in this group. Boys and girls are still seen as homogenous groups despite the extensive body of research on the concept of gender, gender identity and discourses as discussed in chapter 3. However, the review findings also suggested a ‘gender blindness’ in relation to later policies with gender being subsumed into inclusion and diversity. There appears to be less of a focus on gender per se and more of a focus on

disadvantage in socio-economic terms, but the issue of gender in education as a barrier should not be lost, as well as the intersectionality of socio-economic indicators and gender. In addition, no reports were found to show how policy was influencing practice and outcomes by gender, although the duty of local authorities and schools is clear with the requirement to report on the impact of policy promoting gender equity. A recent statistical release (UK) in 2014 (Department of Education, 2014) of the 'early years' attainment profile again showed no change in the gender gap with girls outperforming boys in all measures. This was using data for all boys and all girls. There can be no prediction other than the attainment gap will still be apparent in 2030 based on this early years' data unless there is a change in policy.

The final chapter of this literature review explores some of the key studies that have led to suggested interventions and strategies to improve attainment outcomes in relation to gender.

## **Chapter 5: Studies on factors/influences and interventions**

### **5.1 Chapter overview**

The legislation and policy emanating from the imperative to improve equal opportunities and gender equity, including in education, have resulted in several studies<sup>26</sup> being commissioned by governments in Scotland, more widely in the UK and internationally. In this chapter the key studies on gender and attainment, with a focus on the academically able groups of pupils, have been appraised and critiqued, and the recommendations have been examined in the context of the impact on thinking and practice.

The analysis revealed no conclusive evidence about what could be the reasons for the gender difference in performance, despite the investment by governments. All of the studies used a similar methodology of ‘testing out’ identified factors from research or examples of ‘good practice’ in schools. There was some use made of the perspectives of pupils, but the views of pupils were not a primary means of collecting data, and little use was made of interviews to gather data from pupils. Only a small number of studies had any longevity, and the data to measure any sustainable improvement was limited. There was little information found for the able, ‘advantaged’ group.

### **5.2 Introduction**

To explore how governments and schools have attempted to address gendered patterns of attainment a literature review was carried out to seek factors suggested and/or tested by researchers that could give reasons for this difference in performance; and interventions and their impact on narrowing the apparent gap between boys’ and girls’ attainment, and more specifically the gap amongst academically able boys and girls.

The literature available on reasons for boys’ academic underachievement was extensive. However, there appeared to be no literature addressing solely the issue being researched in this doctoral study of academically able pupils and so the findings from the review, the discussion and critique of the literature is not confined to this able group but is more wide-ranging. However, any aspects relating specifically to academically able boys or pupils are

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<sup>26</sup> A definition of study in this context is a literature review of research literature and policy documents; a report based on in-school investigation(s) using ethical principles; a report based on school practice (for example by Inspectors of Education).

highlighted. The discussion does focus on secondary age pupils.

In this chapter brief consideration is given to the factors external to schools that could be influencing attainment to give a social and cultural context. As a sequitur to Chapter 4, which explored the policy landscape of gender equity, the more in depth discussion in this chapter is focused on some key studies instigated by governments, or agencies/bodies linked to government, in Scotland, England and one study in Australia. The key studies focus on factors and strategic interventions in the school environment. The extensive literature giving research findings on individual factors, for example peer pressure, male role models and so on, is not discussed in this chapter but is used in later chapters, where relevant, to discuss and critique the findings from the grounded theory analysis of the qualitative data.

### **5.3 Overview of factors and explanations for the gender difference in attainment outcomes**

There are a wide range of factors that have been identified by researchers to try to explain the difference in patterns of attainment amongst boys and girls. Some of the literature focuses on in-school factors that make no reference to gender as a construct, whereas others see this as the key to explaining the difference between boys' and girls' attainment.

The researchers who do not focus on gender as a construct, look simply at pragmatic solutions to address the perceived problem, with some investigating single factors by way of explanation of the gendered pattern of performance, for example, literacy, learning styles, behaviour and peer pressure. Others, for example Myhill (2002), go further and believe that focusing on gender and gender specific factors is not helpful, rather the focus should be learning and pedagogical approaches, which she believes are more important than gender per se.

Researchers who do see gender identity, and how it is constructed as key, offer different explanations, looking from the perspective of gender, gender construction and identity, and come from different stances - modernist and poststructuralist. For example, Murphy and Elwood (1998) suggest that boys and girls respond differently to their experiences, which have been explained through biological difference, or differences linked to socialisation, which is external to the school environment. On the other hand, poststructuralist thinkers offer a different view. For example, Francis (2000) postulates that it is how boys and girls

perceive their gender identity and construct their gendered roles that are the defining factors. This focus on gender construction and identity recognises the role that the lived experiences of boys and girls outside of school, within their own social environment and culture, influence boys' and girls' thinking about their own gender identity, with the multiplicity of masculinities and femininities. This gender identity can then influence their learner identity within the school setting.

The complexity of factors and their intersection raise questions, both from the perspective of gender being interlinked with other social factors: class, disadvantage and ethnicity, and how all of this contributes to attainment or, conversely, underachievement (Forde *et al.*, 2006). There is also the interplay of different factors within the school environment and how these factors can influence the attainment of pupils.

The factors and strategies that have been reviewed are wide-ranging but can be divided into two groups: **'external' factors** – not the exclusive product of the school environment, for example those associated with biological differences, differences in socialisation, and the impact of societal changes during the latter part of the twentieth century; and **'in-school' factors** - those that can be linked directly to the school, for example policy, pedagogy, ethos and behaviours, including intrinsic personal attributes of learners (Sukhnandan *et al.*, 2000). However, it is acknowledged that separation into distinct categories would suggest mutual exclusivity of factors and could underplay the mutually inclusive nature of factors that can influence performance.

### 5.3.1 External factors

External factors are influential in gender construction and gender identity. Social and cultural environmental factors are important, including the influence of parents and family background (Powney, 1996), but their complexity makes it difficult to conclude how this affects boys and girls. Socialisation is an area of research that has drawn attention. For example, babies and children develop traits that could be considered as gendered, largely influenced by how they are 'brought up', with consequential expectations and acceptance of 'gendered' behaviour. (Powney, 1996; Sukhnandan *et al.*, 2000). This early shaping of gender can influence their identity as a learner, and this can continue to be reinforced by parents, the family and society more generally. The case was made by Pahl and Kelly (2005), and Torsi (2005) that parents should be involved in understanding gender, as the influence of the family and parental support has been suggested as having an influence on

attainment (Mensah and Kiernan, 2010). Harris and Goodall (2007) go further in suggesting that parents can reinforce gender inequalities. Social class is linked to perceptions of gender, for example working class reinforcing male dominance and female passivity (Paechter, 1998; Renold, 2004; Haywood and Mac an Ghaill, 2006). The discussion on intersectionality (section 3.6) between gender, attainment and class discusses the middle class expectations of being successful academically, but also how this can be challenged by the gender identity that boys develop. This can lead to fluidity and complexity in learner identity and is an example of how factors out of school can influence behaviour in school.

There is a belief that gender stereotyping can act as a barrier, and it is important to have flexibility in gender construction if it is not to hinder opportunities. “These limiting views of male and female identity endure at a time when we can least afford to limit students’ flexibility in their identity construction” (Guzzetti *et al.*, 2002: ix). There have been several studies challenging stereotypical gender construction (Davies, 1997; Paechter, 1998; Francis, 2000). Mac an Ghaill (1994) and Martino and Berrill (2003) highlight the importance of understanding the complexity of the concept of gender, rather than seeing gender as two mutually exclusive categories, and how this plays out within a school setting. This is an important consideration when factors that impact on boys’ attainment, and the strategies to address underachievement, are examined. Although there is research on gendered patterns of attainment referring to gender construction and identities, gender construction as a factor cannot be considered in isolation. Indeed, how gender is socially influenced and constructed can impact on the development of the curriculum, learning and teaching, and the forming of relationships (Gilbert and Gilbert, 1998; Martino and Palliotto-Chiarolli 2003).

### **5.3.2 In-school factors**

The literature review on national policy in Chapter 4 confirmed that there is a mandate for schools to address gender related issues as part of the wider inclusion agenda. Rather than give an overview of all the factors that have been identified from the wide range of literature, and in light of the investigation discussed in the last chapter on the policy landscape that has developed in Scotland and the UK since the inception of equal opportunities, a more focused approach has been used, centring on studies commissioned by the Government in Scotland, but including studies from other parts of the UK and from Australia. It was found that there had been little research before 1996 in Scotland (Powney,

1996) exploring boys' underachievement from the perspective of school practice. There was limited research literature found that related specifically to factors relating to gendered patterns of attainment amongst academically able pupils.

The criteria for studies to be included in this review of the literature were:

- *A focus on in-school factors.*
- *The breadth of the study:* those studies looking widely at the factors to seek reasons for the phenomenon, and/or strategies, and consequential impact.
- *The methodology:* where there was a wide-ranging literature review, and/or an in-school investigation using questionnaires or interviews with key stakeholders to seek views on pertinent factors, and strategies employed or trialled.
- *The commissioning body for the study:* those commissioned or sponsored by Governments or their agents in response to the political agenda of equal opportunities, or more specifically gender equity.
- *The country the study was set in:* all those in Scotland. In addition, because the equal opportunities agenda, and more specifically the GED, was a UK driven policy, studies set in other UK countries were also considered. One study from Australia was included because it did fit the criteria above and was strongly influenced by policy, which was followed up by a report on the impact of the strategies and interventions tried.

Some key questions were posed when reviewing these studies:

1. What research by governments or their agents, and researchers has been actively promoted, to identify factors that could explain or contribute to the difference in attainment between boys and girls?
2. What methodologies were used in the study both to research the factors and to seek impact?
3. What were the factors identified in the literature believed to have contributed to boys' underachievement?
4. What strategies and interventions were recommended to overcome the factors believed to impact on gendered patterns of attainment?
5. What criteria were used by researchers to critically appraise the strategies tested?
6. Which strategies demonstrated evidence of positive impact on improving the gender equity in attainment outcomes?

7. What were the overriding strategies that were having the greatest impact on addressing gendered patterns of attainment generally?

A comparative analysis of the studies selected, using the criteria above, is shown in Appendix 8. This analysis looks specifically at purposes and outcomes as well as the substance of the studies themselves, both from a policy perspective and the potential impact on the schools and the wider systems. The table is arranged chronologically to show the timing of the studies. The table captures the study methodology; the main country where the study was sited; who commissioned the study; whether there was a focus or a mention of those able pupils who were working at the highest levels of study in their year group; key points relating to the factors/explanations discussed in the study; strategies that had been found to be successful in reducing the gap or strategies suggested, and any recorded impact. A column was included to capture whether gender as a construct had been considered.

## **5.4 Analysis of the key studies**

### **5.4.1 Response to policy**

All of the studies examined in Scotland were commissioned by the Scottish Executive/Scottish Government (the devolved Government in Scotland) or the Scottish Education Department, pre-devolution, to respond to legislation and policy, for example the *Equality Act 2006*. The work undertaken by Condie *et al.* (2006) was commissioned by the Scottish Government to support the *Gender Equality Scheme (2008 – 2011)*. This work resulted in a paper being published giving strategies considered successful in addressing boys' underachievement. Skelton *et al.*'s (2007) study was commissioned in response to the *Gender Equality Duty* and the studies carried out in England and Wales were also in response to government and government bodies' requests.

One study carried out in Australia (Parliament of the Commonwealth of Australia, 2002; Zbar *et al.*, 2003) illustrates the type of activity, in response to policy, that aimed to address the issue of boys' underachievement. This project was instigated by the Australian Government as a result of concern about boys' underachievement, identified from attainment data. The project focused on boys' underachievement because of the evidence: (poorer literacy skills and poorer after-school employment rates in particular), that showed boys living with social disadvantage were not having their needs met. Girls who gained



most were those in higher socio-economic groups (less disadvantaged). The Australian study had significant political input, being driven by the Government. The whole programme was supported by considerable financial investment. There was an impetus through policy to promote work on gender differences in attainment but only Australia carried out a wide scale and longer term study to meet the demands of the policy imperative.

#### **5.4.2 Chronology**

The earliest review examined was the work carried out by Powney (1996). At the time of the review Powney asserted that there was little research in Scotland on gendered patterns of attainment, with any research that there was focused on girls' underachievement and lack of equal opportunities. In Scotland this was followed by further studies by Tinklin *et al.* (2001); Forde *et al.* (2006) and Condie *et al.* (2006). As far as can be determined, there has been no follow up to these studies, other than a publication as a sequel to Condie's report (Forde *et al.*, 2008), nor any further advice or study of this kind commissioned by Government since Condie's report in 2006. Looking to England and the rest of the UK, Sukhnandan *et al.* (1999) and Sukhnandan *et al.* (2000) (published separately in two parts) appeared to be the first study of this type. This was followed by the work of Ofsted in 2003, then a study by Younger and Warrington in 2005 (although their study took place over a four-year period from 2000 to 2004), and the most recent study by Skelton *et al.* in 2007. The Australian study was of longer duration beginning with a published report of recommendations in 2002, and followed up with action research in schools and an evaluation report in 2008. Estyn in Wales also published a report in 2008. The ten studies carried out between 1996 and 2008 demonstrated the importance placed by governments on addressing this apparent underachievement of boys.

#### **5.4.3. Focus on academically able pupils**

This doctoral study has a particular focus on the academically able pupils. It was Powney (1996) who reported that there was little evidence of research on gender difference and high attainment despite the recognition, through external examination data gathered by Powney in England and Scotland, that there was a pattern emerging amongst academically able pupils. As far as can be determined, there has been no specific study in this area before or since Powney's review.

Of the key studies considered, three included references to the more able group: Sukhnandan (2000) and Estyn (2008) included the specific category A(A\*) to C at GCSE; and Tinklin mentioned the inclusion of higher ability groups. Younger and Warrington's study stated that all abilities and social classes were included. Only one of the case study schools in Condie's work was not in an area of disadvantage and one school did look at streaming by ability. Skelton *et al.* (2007) made reference to the middle class group when she observed that the behaviour and anti-learning culture, traditionally assigned to those who were from working class backgrounds, is present amongst middle class boys.

#### **5.4.4 Methodology of the study**

Of particular interest in examining the studies exploring 'in-school' factors was the methodology used to investigate the factors that could be influencing the underachievement of boys.

All of the studies used a literature review either exclusively or as part of the study. Only three of the ten key studies used literature reviews alone. It is worth noting that the literature review carried out by Forde *et al.* (2006) was the one used by Condie *et al.* (2006). All of the other studies reviewed strategies suggested by schools, or gathered evidence from case study work in schools. For example, Sukhnandan used responses from 97 local authorities and followed up with some case study work in schools. The work of Younger and Warrington (2005) developed a longer-term programme that trialled some of the interventions to address the factors considered to have a negative impact on boys.

In the work carried out in schools, professionals, parents and pupils were surveyed or questioned. In only three of the studies: Tinklin *et al.* (2001), Younger and Warrington (2005), and Condie *et al.* (2006), were views about what could be factors influencing learning sought from pupils through interview. It was Tinklin *et al.* in 2001 who recommended that pupils' views should be sought and used to inform any strategy.

The Australian project was on a much larger scale than any of the other studies examined, both from the perspective of investment of time and financial resources. The project went beyond the collection of evidence to find factors to formulate a strategy and interventions, to a pilot trialled in schools. An initial project - *Boys' Education Lighthouse Schools* (BELS) ran from 2003 till 2005 (at a cost of A\$7M) and involved 350 schools. This was then followed up by the *Success for Boys* programme (at a cost of A\$19.4M) involving

1601 schools. This *Success for Boys* programme used the interventions over a lengthy period of time to establish impact. Despite the scale of the project there did not appear to be evidence of pupils' views being sought directly.

What is concluded from this analysis of the methodologies used is that not all of the studies engaged directly with work in schools, and the evidence of factors or successful interventions in schools were being based mainly on views of professionals and through school inspections or similar. Only three used the pupil voice. All of the investigations carried out in schools began with the 'hypothesis' of a particular factor being the cause of boys' underachievement and set out through interventions to prove or disprove the factor(s) under scrutiny.

#### **5.4.5 Factors proposed to explain differential patterns of attainment amongst boys and girls**

Before exploring the findings of the key studies about in-school factors it is worth noting that the findings tended to be generalisations, which can be helpful when considering the macro level, but generalisations are not helpful when considering issues at an individual level (Arnold 1997).

The main points arising from the comparative analysis of these key studies have been grouped under four headings: curriculum, learning, teaching and assessment; attributes of boys; the school culture and learning environment; and gender as a construct influencing attainment. However, it must be stressed that these groupings are artificial and to isolate each factor is not to disregard how these factors can intersect.

##### ***Curriculum, learning and teaching and assessment***

The issue of all pupils having open access to all curricular opportunities, which was an issue before the 1990s, was no longer the case. However, there might still have been issues about choice of subjects (Tinklin *et al.*, 2001; Zbar *et al.*, 2003) because of gender identity (Skelton *et al.*, 2007) and similarly advice, notably career advice, which was along gender stereotypical lines (Skelton *et al.*, 2007). The Australian study also raised the issue of the curriculum but from the stance of seeing a prescriptive curriculum not addressing the needs of boys, rather stressing the importance of curriculum frameworks to allow teachers flexibility to meet the needs of groups of boys or girls.

Over half the researchers mentioned learning and teaching approaches and learning styles as being important factors in boys' learning. Skelton *et al.* (2007) challenged the claim of boys having specific learning styles from the evidence gathered.

Assessment, and notably the types of assessment instruments, and the way boys approached assessments as being different, were raised by several researchers as being a barrier for boys. Skelton *et al.* (2007) challenged the notion of gender-biased assessment procedures from their evidence.

### ***Attributes of boys***

The key points raised in several studies were boys having a negative attitude to school and learning; peer pressure that reinforced a masculinity running counter to the school ethos; and boys' behaviour, which was mentioned most frequently. However, the focus of these studies covered all ability ranges and social class with no mention specifically of middle class/advantaged high achieving boys. As previously mentioned in section 5.4.3, Skelton *et al.* (2007) did suggest that behaviour that was disruptive to learning was also seen amongst middle class boys but did not define their ability.

### ***School culture and learning environment***

School culture and the learning environment were cited in several studies as being influential in promoting positive attitudes amongst boys. The social and cultural environment out of school could influence learner identity, but learner identity was also influenced by the culture or ethos of the school. Tinklin *et al.* (2001) and Powney (1996) both raised societal factors and socialisation as shaping aspiration and ambition particularly in the context of learning, and impacting on cultures and subcultures. Few of the studies placed emphasis on gender construction and how this impacts on the learner.

### ***Gender construction and the influence on achievement***

Despite the extensive literature considering gender from the perspective of how it is constructed and enacted, the key studies made little reference to this aspect other than the work of Skelton *et al.* (2007), and the literature review carried out by Forde *et al.* (2006). It was mentioned in the Australian *Success for Boys* programme, where this was raised in the context of indigenous boys. However, that is not to say that gender in relation to some of the factors was not mentioned. An example was literacy. As teachers grappled with trying to improve the standards of literacy amongst boys by using 'boy friendly' texts, Sukhnandan (2000) suggested they may be inadvertently reinforcing gender stereotyping

and gender duality. Ofsted (2003) also took an essentialist stance in claiming that boys had specific attributes to learning as did the Australian *Boys Getting It Right* report (2002) with the focus on boys and their learning and not on all pupils.

To continue to refer to boys and girls as two homogeneous groups, particularly where the focus is only on addressing the issue of boys' underachievement might also compromise underachieving girls. Several points were raised in relation to gender duality. Tinklin *et al.* (2001) promoted a 'gender jigsaw'. Underachievement not applying to all boys and all girls was raised by others (Younger and Warrington, 2005; Forde *et al.*, 2006; Estyn, 2008). Forde *et al.* (2006) went further in suggesting that strategies had failed because masculinities and femininities were not recognised, with boys being seen as a homogeneous group, and boys not being given the opportunity to consider the range of masculinities.

Butler (2006) points to gender duality as the cause of continuing to see gender differences both in delivery and responses. There is confirmation by Davies (2006) in her study, using a deconstructivist stance, that this duality of gender sees gendered practices continuing to exist. This was echoed by the importance placed by Davison (2000) and Dillabough (2006) on moving away from categorisation, especially binary gender. Jackson (1998) and Whitelaw *et al.* (2000), amongst others, considered the impact of relationships between boys and their teachers and their peers, from a gendered perspective, and the impact this had on attitudes to academic study. The importance of student/teacher relationships was emphasised in the study carried out in Australia. Pedagogy tended to be framed in these studies in terms of different learning styles and teaching approaches to favour boys or girls without consideration of pedagogy being a vehicle for countering gender stereotyping and at the same time responding to gender in a constructive way.

Skelton *et al.* (2007) stressed the importance of considering gender and its construction. The main factor they found was the performativity of girls and boys who acted out their gender as opposites. This self-generated gender identity was deep rooted and pervaded all ages and transcended social class, and was reinforced by peer pressure, which, could contribute to a lack of focus on learning. School culture could reinforce this duality or could counter it. Schools that promote a binary view of gender and do not consider multiplicity of gender identities could create barriers to solutions.

#### 5.4.6 Strategies and interventions

The range of factors identified in the studies generated a number of strategies and interventions. These strategies, particularly in the Australian case (the widespread development programme initiated in schools) aimed to bring about change and improvement. The identified strategies are considered in broad areas: whole school policy; curriculum, learning and teaching; support; classroom organisation; and professional development for staff.

Policy at whole school level was a strong element and advocated matching strategy to local context (Sukhnandan, 2000; Tinklin *et al.*, 2001; Forde *et al.*, 2006; Skelton *et al.*, 2007; Estyn, 2008), as well as being responsive to making changes as a result of any evidence gathered (Tinklin *et al.*, 2001). Tinklin *et al.* (2001) stressed the need for a range of strategies, and the importance of being aware of the complexity of the range of factors. Behaviour policy (Tinklin *et al.*, 2001) was one that was emphasised, promoting clear expectations and high standards (Ofsted, 2003) and building positive attitudes.

Delivering high quality learning and teaching was raised by all as the key to improvement, particularly learning and teaching that was motivational and promoted positive attitudes (Zbar *et al.*, 2003), learner centred (Estyn, 2008) and catered for different learning styles, with some not advocating 'boys' learning styles but considering such pedagogy as 'gender sensitive' approaches (Forde *et al.*, 2006; Forde 2014). Estyn (2008) emphasised the importance of not having a gender stereotypical stance. The need to have practical activities for boys, formative assessment and vocational opportunities was stressed (Ofsted, 2003). Only Estyn (2008) mentioned the use of ICT as a motivational tool to engage boys with learning, and for the development of assessment for boys. The data analysed in several of the studies showed that boys' literacy skills, as assessed, were poorer than girls and so this was seen as a key strand to focus on in schools.

Support through mentoring (Sukhnandan, 2000; Zbar *et al.*, 2003; Condie *et al.*, 2006; Estyn, 2008) with a specific intervention of using role models to change attitudes about learning, was advocated. Younger and Warrington (2005) were keen to stress that mentoring should not just be for those seen as not achieving a specific measure, but should be for all who needed this level of support. Support of parents through parental engagement was not a strong theme but one that was raised in the Scottish studies by Tinklin *et al.* and Condie *et al.*

Classroom organisation through single sex groupings or classes was recommended (Sukhnandan, 2000; Ofsted, 2003; Condie *et al.*, 2006) with some emphasising the need to have these only where evidence showed that there would be a clear benefit (Forde *et al.*, 2006), and ensuring that gender stereotyping was avoided (Sukhnandan, 2000). In one of the case study schools in Condie's study, a school serving areas of deprivation, high ability streaming was used aiming to accelerate progress for identified pupils. This was not just targeted at boys. However, one of the issues found was that the 'top' groups tended to be comprised mainly of girls, which raised issues for those boys in these classes.

The theme of professional development (Sukhnandan, 2000) focused on improving the quality of delivery as well as raising staff awareness about gender (Tinklin *et al.*, 2001; Forde *et al.*, 2006) with Skelton's focus being much more directed towards teachers working with pupils to consider different ways of thinking about gender. Working collaboratively within (Tinklin *et al.*, 2001) and between schools was also suggested (Younger and Warrington, 2005).

The Australian study invested heavily, both in time and resources, in professional development and this was their key driver for improvement. The *BELS* programme, trialled in 350 schools, was scaled up to operate in over 1600 schools after two years. The programme aimed to develop teachers' understanding of how to support boys in their learning by creating a quality learning environment, with the underpinning theme of developing strong relationships. The programme went beyond specific interventions or classroom strategies to whole school considerations of leading and managing change, including teachers' involvement in action research, with teachers and schools being provided with a range of professional development material.

Finally, explicitly or implicitly, a strong, positive culture was advocated to bring about improvement, and a climate to change attitudes towards learning. Only Younger and Warrington (2005) and Sukhnandan (2000) emphasised the need for strong support from the leadership of the school.

#### **5.4.7 Impact**

Considering all of these studies, there has been a considerable investment in time, and in the case of the Australian study, considerable financial investment. There is general agreement about strategies suggested in these studies, to improve the attainment of boys. In

some cases, a study was built on the one before, using some of the themes and ideas from previous work. With this large body of work there was an expectation of seeing impact through quantitative attainment data.

Some of the studies did not set out to show impact but were reviewing literature to provide information (Powney, 1996; Sukhnandan, 2000; Forde *et al.*, 2006). The key outcome of some of the other studies was that it was not easy to measure the impact because there was no data (Sukhnandan, 2000), or no data to show long term impact (Ofsted, 2003), or the timescale of the project was limited (Tinklin *et al.*, 2001; Condie *et al.*, 2006). In some studies, notably Younger and Warrington (2005), the impact appeared to vary in schools, with their advising that there could be impact from strategies adopted but not with the view of there being a 'quick fix'. Estyn (2008), drawing evidence from inspections and school visits, had not found evidence of success in schools and they cited the reason that schools did not have policies or strategies in place to address the underachievement of boys. Skelton *et al.* (2007) in their review were very clear that there would not be sustainability unless gender construction was considered and there was a move away from gender duality.

None of the studies were longitudinal, that is following the impact on identified boys to monitor their progress in educational achievement over a period of time. All but the work of Younger and Warrington, some of the case studies in Condie's work, and the Australian project, were short lasting: in the region of a year.

The main impact emerging from the large-scale project *Success for Boys* was the capacity building amongst the staff and improved pupil engagement with learning. With the financial investment, the length of time and the number of schools involved, it was expected that the impact in this project in terms of attainment would have been demonstrable, giving some quantitative evidence, but because of the limitations in the data collected there was no certainty about improved outcomes. Condie *et al.* (2006) did report some improvement in attainment in their streamed classes where the focus was streaming by ability and not gender, and so change in differentials in performance by gender were not reported.

#### **5.4.8 Conclusion - the key studies**

A wide range of schools was examined in the studies reviewed. Schools are complex



organisations and no two schools are the same. The demographic factors, such as location, deprivation, size, co-educational or single sex schools, and rurality all impact on young people's lives. These factors are generally fixed and teachers and leaders have no influence over them. Other factors such as school policy: policies on ethos and expectations (including role modelling), equity, curriculum, learning and teaching, assessment and support for pupils; and professional development of teachers, including opportunities for empowered leadership, are able to be changed and improved by the school itself and can impact on attainment and achievement.

To realise impact, it is important to be clear about the factors and strategies that have a positive impact (Powney, 1996; Fullan, 2005). These key studies did give a comprehensive list of strategies centred on efforts to improve learning and teaching. Fullan's analysis is relevant to the debate on gender related performance, although his work is not focused specifically on gender. The priorities that Fullan (2005) discussed were improved pedagogical approaches with a focus on achievement. He went on to emphasise the importance of embedding system-wide structure to support strategies identified; distributed leadership; and transformational change methods that supported creativity and innovation. Fullan (2005) also stressed that to bring about sustainable change there had to be a school culture to support the change, but recognising sustainable improvement takes time. The culture of a school was an essential ingredient in this debate.

The 'gender regime' in a school impacts on the culture and in turn on ethos and pedagogy, which concurs with the aspects identified by Fullan (2005). The culture is dependent on the leadership and professional development of staff, to give staff a deeper understanding of gender related issues, and their ability to provide a gender *sensitive* classroom: one that recognises the diversity of identities. Reay (2006b), Haywood and Mac an Ghail (2006) discussed how there was no one identity, rather multiple identities shaping interactions and response to the environment. Ruddick and Urquart (2003), gave several influences shaping identity, for example different learning environments, groupings of pupils, and achievement. Schools are therefore creating learner identity. Ruddick and Urquart (2003) and Reay (2006b) found at transition between primary and secondary, that identity was not shaped by gender but by how children saw themselves as a learner. The complexity of identities as learners also influences the development of gendered identities, which "reinforce or subvert dominant hegemonic masculinities and femininities" (Renold, 2004, cited in Forde *et al*, 2008: 54).

Culture is influenced by the classroom, which can be “gendered in its organization and practice” (Liu, 2006: 433). Francis (2000), Warrington and Younger (2000), Skelton (2001), Skelton and Francis (2003) discussed how boys had a higher profile in classrooms: greater participation, putting greater demands on the teacher through requesting support and feedback, and with overt negative behaviour (Streitmatter, 1994). This perpetuates gender difference, with this dominant masculinity displayed by boys leading to their being disadvantaged in their learning (Lesko, 2000; Skelton, 2001; Renold, 2004; Connell, 2005). Barriers can develop between boys and girls reinforcing behaviour characteristics traditionally attributed to boys and girls (Liu, 2006: 434).

Classroom and school culture need not be fixed. In the context of sustainable impact Forde *et al.* (2008: 23) considered the need for “capacity building” and “accountability”. Several of the key studies, put a strong emphasis on professional development. What was less overt was how relevant and robust this professional learning was in developing staff’s knowledge and understanding of the key gender issues including gender construction and identity. There was more emphasis on the types of interventions rather than a strategic plan for ‘capacity building’.

The key studies, and more specifically the Scottish studies, all acknowledged underperformance of boys but, apart from the Australian model, there was not a widespread systematic structure to support the strategies used. The Australian project was on a large scale and the ambition of the project was to deliver improvement through professional learning for teachers and leaders, providing them with a framework to understand how to deliver boys’ education through strategic planning and action research projects. However, the policy framework underpinning the project suggested that underachievement did not apply to girls.

Social constructionist understandings of gender have been replaced in this report by neo-conservative, masculinist understandings of gender based upon the perceived requirement to improve the educational engagement and performance of boys (O’Donovan, 2004: 8).

Boys’ underachievement was not integrated into the overall drive to improve attainment: policy and resources were reinforcing masculinities. Boys’ education was considered in the light of the perceived feminisation of education and there was a move towards tailoring the curriculum for boys. Some of the initiatives were single sex classes, and more male teachers to provide male role models (Martino, 2006). This stance appeared to reinforce hegemonic masculinity (Mac an Ghail, 1994; Epstein, 1998; Martino, 2006), and hence

gender “essentialism” (Martino, 2006: 351), leading to strategies addressing boys and girls as two distinct groups with perceived different traits and learning styles (Mills et al, 2007). *The Boys: Getting It Right* report recommended a focus on learning, teaching and assessment to improve boys’ outcomes and claimed that boys and girls learnt in different ways with boys being more able in the scientific and mathematical sphere, and requiring more learning involving physical activity. The report did not acknowledge the influence of the school environment on boys’ perception of their role in relation to gender (Martino, 2006). How gender is socially influenced impacts on the curriculum, learning and teaching, and relationships, (Martino, 2006). There was also no consideration given to which boys and which girls. There was mention of the need to build skills for active citizenship as well as recognising the importance of building self-esteem, self-confidence and aspiration and ambition. However, to develop these wider social and personal attributes would demand exploring how boys understand and develop masculinities (Martino, 2006). Martino (2006) asserted that the recommendations for the *BELS* project were based on selective evidence: those boys seen as disadvantaged, whose needs were not being addressed by schools and not those who were advantaged but underachieving as in this study.

The policy direction in the Australian study provided a framework for addressing boys’ underachievement, which gave the opportunity for a diversity of responses by schools. The strategies were based on ‘best practice’ and so there was freedom for schools to address local need. This produced a range of solutions. Despite the implicit gender essentialist in the policy and the views expressed by Martino (2006) in their critique, some schools adopted a different approach to this gender work and addressed the complexity of gender and its construction, not just focusing on ‘failing’ boys but rather adopting a ‘which boys, which girls’ approach. There was a focus on the individual and not the problem of boys, addressing the needs of girls at risk from underachieving as well as boys (O’Donovan, 2004). There is a balance to be struck between the focus on the ‘individual’ but at the same time recognising the structural and cultural barriers.

The criteria for success of the Australian programme were effectiveness in learning and engagement of boys, appropriateness of the programme, and efficiency of access to suitable materials for delivery of boys’ education. The programme was evaluated in 2008 (Department of Education, Employment and Workplace Relations, 2008) and the results of the evaluation showed that the professional learning had enhanced teachers’ understanding and was successful in schools where there were already values and long term planning in place to take forward boys’ education. The programme also improved teachers working

together: networks between teachers in different schools as well as within schools. From the perspective of teachers, the impact of boys' engagement with learning improved but the impact on attainment was less clear as the quantitative data available was limited.

To effect change in underachievement depends on acknowledging underperformance but also tracking progress of interventions through the use of data. Criteria for measures of success, and data to track the effectiveness of the strategies and improvement in boys' performance, appeared to be lacking in these studies despite being recommended by some (Forde *et al.*, 2006; Estyn, 2008). The data used by some researchers to exemplify the underachievement issue was for groups and not individuals. To continue to consider the data for boys as a homogeneous group continues to mask which boys, or groups of boys, are underachieving. Conversely, the data showing all girls' attainment to be better than boys masks those girls who are underachieving. More nuanced data for groups of boys is necessary, particularly how gender intersects with class, as well as individual pupil data.

In a later publication in Scotland drawing from some of the studies in Scotland reviewed in this thesis and other work, Forde *et al.* (2008) also pointed to the lack of monitoring and evaluation of impact. They acknowledged there was some distributed leadership, but continuous professional development (CPD) was not targeted at strategies to consider the gender related issues. This was reliant on individual teachers' interest and enthusiasm. Thus there was not the spread of practice that could have been achieved. To have long-term impact there must be "coherent, inclusive policies" and "'gender-sensitive' strategies" (Forde *et al.*, 2008: 25). Where awareness is raised with teachers about traditional gender roles and identities, these roles and identities can be changed. There is a need to focus on gender and issues related to gender in initial teacher education and through professional development: treating boys and girls along gendered lines must be challenged (Liu, 2006: 435). Many girls lack confidence in their ability and lack aspiration and ambition and continuing to address this is important. However, schools can adopt a polar view of boys' and girls' needs, splitting them into two distinct groups and this is not helpful in supporting pupils with their diversity of experience (Kenway, 1995).

It is necessary to shift the traditional view of culture in the school both from the perspective of pupils and staff. Forde (2014) stressed the need for the gender-sensitive classroom. This is based on the premise that pupils themselves develop their gender identity despite attempts to have a gender-neutral learning environment. This allows for the relational interplay of gender to be appreciated (Maher and Tetreault, 2001). No study had

considered seeking the views of boys about their lived experiences as learners or investigated their perceptions of their identity as learners to explore the intersection with their views of their gender identity.

The last chapter explored national policy and legislation and the aspirations of governments in relation to gender. Addressing boys' underachievement through policy demands resources: documents, websites, reports, research and financial resource (Francis and Skelton, 2005) and the review in the last chapter identified some of the reports and support provided as a response to policy. The key studies discussed in this chapter drew from research studies and practice in schools, and in some cases used considerable resource. Despite the cyclical nature of policy and commissioned studies, the work did not see policy, supportive material or resource translated into expected improvement.

## **5.5 Concluding remarks**

In reviewing the literature on gender, in the context of attainment, there is clearly a need to continue to explore why there is a gap in performance, because there is a duty on schools to do so, and there are no definitive strategies or solutions that have demonstrated sustainable positive impact on attainment from the evidence studied. To deliver sustainable improvement there must be consideration given to the local context. Whilst generalisations give a starting point, learners should be identified and targeted with strategies and interventions that meet their needs. And critically, strategies should be tracked and evaluated regularly, and adapted where necessary (Sukhnandan, 2000).

Boys' underachievement has tended to focus on low achievers particularly from the perspective of a socio-economic stance of deprivation, and the impact of 'masculine' resistance to schooling rather than conformity. Research from the perspective of high achievers and how they are perceived or see themselves has not attracted much attention (Mendick and Francis, 2012), despite the statistical evidence demonstrating significant differences in able or potentially able boys' and girls' attainment.

The review has found very little research literature on able advantaged boys, the focus of the work in this doctoral study. The factors and resultant strategies were applied to boys of all abilities.

The review carried out has raised some key questions in the context of the case study

school, school A.

Several factors were identified as having an impact on boys' underachievement.

*1. Are all factors relevant to the academically able advantaged boy?*

All of the studies examined used a scientific method to 'test' the efficacy of the strategies. No study had used a method which began with considering the views of the learners themselves. Some of the key studies examined did use the pupil voice but only to seek their views on specific factors and/or strategies. Tinklin *et al.* (2001) recommended using the views of pupils.

*2. What are the views of academically able advantaged boys on their own learning and their barriers to learning?*

The inclusion in the key studies of the understanding of gender and gender construction was variable with gender duality being a common theme, treating all boys as a homogeneous group.

*3. How do boys view their own identity and what, if any, impact does this have on their learning?*

*4. How do teachers view boys and their learning? What is their stance on gender and gender identity?*

In the studies examined, the focus was on boys with some studies addressing the learning needs of all.

*5. What are the views of advantaged able girls on their own learning and their barriers to learning?*

*6. How do girls view their own identity and what, if any, impact does it have on their learning?*

Some of the studies considered the influence of parents.

*7. What are parents' perceptions of their son's learning and attainment? Is this influenced by their views on gender?*

The next chapter describes the methodology adopted, a grounded theory approach, to explore the views of boys, girls, teachers and parents, investigating gendered patterns of attainment amongst the academically able pupils with an emphasis on the views of boys.

## **Chapter 6: Research methodology**

### **6.1 Chapter overview**

A central issue in the area of gender equity in education is understanding the lived experiences of pupils in schools. This chapter explains the rationale for the research, the research paradigm and the methodological approaches adopted to privilege the authentic voices of boys in School A. A phenomenological research paradigm was selected as it fits the stance of exploring pupils' lived experiences, with a case study approach using a range of school level data. School A was the main test site with two further schools selected to explore transferability and generalisation of the findings from School A. Seeking the views of academically able boys from the senior year groups was the focus. Views were sought of girls from the same year groups and similar ability, as well as views of some teachers in all three schools, and parents in School A.

A grounded theory approach method was adopted for gathering data through semi-structured interviews, using open ended questions. The aim was to facilitate an exploration of personal experiences, views, perceptions and opinions of boys' learning, and compare and contrast the views of boys with those of girls, a range of staff and some parents of the boys participating in the study in School A. The same approach was used in the two other schools, Schools B and C, gathering views from boys, girls and teachers. Grounded theory was used to analyse the data through a process of conceptualisation and theorising of the qualitative data gathered, to seek explanations 'grounded' in this data rather than in *a priori* theories.

This chapter also critiques some key strands in the methodology adopted, including the contested role of the interviewer, and in School A, the 'insider' status; the sampling of participants in the three schools; interviewing, including the challenges of working with focus groups; the modus operandi for questioning used in grounded theory; and the transcription of the interviews.

### **6.2 Rationale for the study and the methodology**

Research was undertaken, both literature reviews and empirical studies, to explore the phenomenon of the interplay between gender and attainment. A selection of this research, reviewed in Chapter 5, drew conclusions and made recommendations for practitioners and

others to begin to consider and address the gender issues in attainment. This research study aims to build on these works, particularly the work that considers how gender is constructed in a learning setting. For example, the work of Skelton *et al.* (2007) attracted particular interest because in their study they found evidence that there was dichotomous gender construction and duality of gender identity that appeared to be contributing to disengagement from learning, and also that hegemonic masculine behaviour and anti-learning culture could be seen amongst middle class boys. The underperformance of advantaged and academically able boys was the starting point for this study.

This study, aims to add to the body of knowledge in this area by taking a particular standpoint:

- To focus on the views of boys, which has not been a prominent feature in previous research.
- To focus on pupil voice, gathering the bulk of the qualitative data by interviewing boys and girls to explore their views in relation to their learning. The gathering of data in this way from pupils appears not to have been a primary method of gathering data in the empirical studies reviewed in Chapter 5.
- To focus on pupils who are high attaining, or who have the potential to achieve highly academically, and who have no obvious disadvantages, which has not attracted much attention previously.
- To use a grounded theory methodology to identify key concepts and patterns from the qualitative data gathered.

To seek explanations using the views of boys, a phenomenological paradigm framework was used. The main focus of this study was to explain the gendered pattern of attainment in one school in Scotland, School A. A case study approach was used in which data from more than one source is collected, in this case more than the views of boys. Gathering data from different sources provides the means to compare and contrast, verify and consider the validity of the data gathered from the boys, and to explore learning from different standpoints. Data was gathered from interviews with girls, teachers and a small number of parents to triangulate the evidence from the boys' interviews. Qualitative data of whole school attainment by gender, gathered over time, was also a source of information. A case study approach was used in two further schools, Schools B and C, to explore the tentative explanations emerging from the analysis of the data gathered in School A, and to consider transferability of these explanations to the other two schools.



### 6.3 Theoretical perspective

This section considers the theoretical perspective that is used as a basis for this research. This section begins with the rationale for the research paradigm. This is followed by discussions about grounded theory as the approach selected; the case study methodology; validity, reliability and triangulation; and concludes with a critique of the researcher as the research ‘tool’.

#### 6.3.1 Research Paradigm

In thinking about the way to approach the methodology for this study, I considered the research paradigm that would best suit, using the definition of the paradigm provided by Somekh and Lewin (2005: 347): “an approach to research which provides a unifying framework of understandings of knowledge, truth, values and the nature of being”: epistemological, axiological and ontological understanding. Seeking knowledge, values, beliefs and perceptions of lived experiences of pupils and views of teachers and parents to add to the views of the pupils, suggested that an interpretivist approach would be most appropriate in seeking answers to the questions in this research (Seidman, 2006).

For interpretivists, reality is not ‘out there’ as an amalgam of external phenomena waiting to be uncovered as ‘facts’, but a construct in which people understand reality in different ways (Morrison, 2012: 20).

Meaning comes from understanding how others perceive their world. There is also the question of what is social ‘reality’? Can this be viewed as an entity almost thrust upon the individual from the external world, or do the individuals themselves construct ‘reality’? (Cohen *et al.*, 2011). This study takes the stance of the latter and adopts a subjectivist or non-positivist approach exploring in depth the “humanly created” world (Cohen *et al.*, 2011: 6). “The participants themselves define the social reality” (Beck, 1979, cited in Cohen *et al.*, 2011: 15). This study does not set out to test a hypothesis or a theory using the data gathered (a positivist<sup>27</sup> stance), but aims to develop concepts from the qualitative data to propose an explanation of the phenomenon. In addition, the positivist method attempts to isolate factors for fair testing, and also eschews values and looks only at facts (Bryman, 1988: 15). In contrast, an interpretative approach does not attempt to select factors that could be influencing the phenomenon, rather exploring widely to seek understanding from the perspective of the subjects.

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<sup>27</sup> A philosophical system recognising only that which can be scientifically verified or which is capable of logical or mathematical proof (Oxford Dictionaries, online).

This interpretivist approach is closest to phenomenology where the focus is on how human subjects give meaning to their experiences (Cohen *et al.*, 2011; Morrison, 2012), and explores these views of phenomena within a given social setting (Titchen and Hobson, 2011). In phenomenology the lived experiences can be explored directly or indirectly. The ‘direct’ method of “exploring human *knowing*” is through the researcher exploring the participants’ experiences by seeking their views, asking questions of the participants (Titchen and Hobson, 2011: 122). The ‘indirect’ method is the researcher being in the participants’ world in a particular setting and exploring this world through observation and interpretation.

The decision to use the direct method through interviews to gain insights in this study rather than through the use of questionnaires, or the indirect method, was principally because the interview allows for an exploratory approach and affords an opportunity to go deeper into a theme as it is raised (Borg, 1963). Having face-to-face interviews also allows the development of rapport, which improves the social encounter with the aim of eliciting detailed qualitative data. Explanations can be given to ensure the interviewees understand what is being asked of them at the time of the interview. The semi-structured interview selected allows time for the interviewees to respond. The disadvantages are that interviews are time consuming, are subject to bias (Borg, 1963), and the data collection can be limited.

Other methods of collecting data, notably by questionnaire, were rejected because they would not be able to capture the experiences or attitudes in the depth and nuance demanded of this research. Questionnaires do have advantages. They can capture far more data, are quick and easy to administer, and are based on a set series of questions that can be constructed in advance. The disadvantages are the data collected, if using closed questions, can be less meaningful: if open-ended more difficult for the respondents to complete, and the respondents may also be unwilling to do so (Cohen *et al.*, 2011).

Phenomenology is an approach where the experiences from the perspective of the subjects are taken at “face value” where “subjective consciousness” gives meaning (Cohen *et al.*, 2011: 18). Using interviews, and to a lesser extent questionnaires (dependent on the types of questions used), the researcher is finding out how the world appears to the participant and it is the researcher who is making sense of what is being relayed by the subject. To do this the researcher draws from his/her own experiences and contexts (Burrell and Morgan, 1979).

There is an argument that mixed methods, rather than the polarisation between qualitative and quantitative approaches; objectivity and subjectivity; positivism and interpretivism, is the new paradigm and there can be an “integrated approach” (Ercikan and Roth, 2006: 14). In this study *qualitative* data was gathered from the participants and interpreted to seek meaning and consider explanations of the phenomenon, and *quantitative* data has also been used to examine performance of boys and girls generally to draw conclusions to look at the historical patterns of attainment by gender and to support the sampling. Drawing from a range of data sources is expected when using a case study approach, as in this study: drawing from interviews with pupils, teachers and, in School A, parents – an *interpretivist* approach, as well as the quantitative performance data – a *positivist* approach. *Objectivity* is demanded of the researcher, both when interviewing and analysing the data. However, to interpret the findings involves “subjective judgement” (Ercikan and Roth, 2006: 17), the downside of which is the potential to skew the interpretation. For example, researchers interpret by drawing from their own knowledge, expertise and experience. Using a case study approach and a grounded theory approach to explore the phenomenon, through the lived experiences of the subjects, and develop explanations, illustrate the opportunities that using a range of methods gives. Mixed methods research as described by Cohen *et al.* (2011) is also applied to sampling, data collection etc., which is adopted in this study, interviewing different groupings within three different schools. Therefore, one paradigm is not advocated but a mixed methodology, with a move towards interpretation rather than solely the interpretative paradigm (Scott and Morrison, 2006: 132), for example in interpreting qualitative data as well as seeking to test the grounded theory in another setting to explore transferability.

### 6.3.2 Grounded theory

This study’s aim was to explore, using a grounded theory approach, the attitudes and experiences of a sample of boys in relation to their learning through interview, seeking meaning through interpretation, in an attempt to explain the phenomenon of the gendered patterns of attainment. To triangulate the evidence, views of others were sought and also interpreted using the grounded theory approach. Grounded theory was the chosen methodology because of its fit with the broad principles of phenomenology discussed above. Grounded theory goes further than phenomenology with ‘theory’ generation being the aspirational outcome. Grounded theory

is a set of grounded concepts integrated around a central category/theme to form a theoretical framework that explains how and why persons, organisations,

communities or nations experience and respond to events, challenges and problematic situations (Corbin and Holt, 2011: 113).

The grounded theory approach is grounded in the data gathered. The method of analysis is to 'code' the data for meaning, as in other qualitative methods, with the emphasis in grounded theory being on conceptualisation: developing concepts from the data gathered, which is then scrutinised for further synthesis to identify key categories (Charmaz, 2014). The theory emerges from this analysis of data collected from participants relating their lived experiences. This approach is in accord with the poststructuralist stance of multiplicity of views and diversity. The aim with grounded theory is to develop links between the data collected, developing categories that ultimately give rise to an explanation of the question being researched (Moghaddam, 2006).

Grounded theory was first developed by Glaser and Strauss in 1965. Since then, with time, different research questions, and researchers developing their own grounded theory approach to fit their research questions, many different forms of grounded theory have emerged (Morse *et al.*, 2009). There are three main variants of grounded theory as highlighted by Creswell (2005): the *systematic* design attributed to Strauss and Corbin (1990) advocating an approach that has structure, with the literature review being completed in advance of the data collection and more specific questions for subjects considered before collecting the data; the *emerging* design attributed to Glaser (1992) where the questions are emergent as the study develops with the literature review completed after the data is collected; and the *constructivist* approach attributed to Charmaz (2014) who suggests that the two previous approaches rely too heavily on the influence of the researcher, and advocates that the participants are integral to the theory construction rather than the theory emerging from the data as subscribed to by Strauss and Corbin, and Glaser. Charmaz does highlight the potential tension between "theoretical construction and a quest for accurate data" (Charmaz, 2014: 85). However, being able to develop concepts from the data, rather than making data fit concepts developed from the research of others, is one of the strengths of a grounded theory approach (Glaser, 2002).

The literature review carried out was not to formulate the questions for interview as advocated by Strauss and Corbin's *systematic* design, but to explore the background to underachievement of academically able boys in both research and policy terms, and how others had approached the key questions under investigation. The grounded theory approach used in this research study uses mainly the approach advocated by Glaser, the

*emerging* design, with elements of the *constructivist* design (Charmaz, 2014). Both Glaser's and Charmaz's approach allow the participants to voice their views without being restricted to set questions on particular themes, and for themes to be explored in subsequent interviews as the themes arise. Glaser uses the term 'theoretical sampling' (Glaser and Strauss, 1967) and Charmaz 'intensive interviewing' (Charmaz, 2014). The analysis techniques used by Glaser and Charmaz differ, with Charmaz's approach to analysing the data being used in this study. The main difference between the approaches adopted by Glaser and Charmaz is the construction of the theory, with Charmaz (2014) advocating an approach that sees the participants involved in theory generation, whereas Glaser (2002: 29) does not believe that participants should be involved. No attempt was made in this study to use a *constructivist* approach in seeking participants to be part of the theory generation. As well as the philosophical arguments rehearsed in Chapter 7 (p.159) there was also the issue of restriction of access to participants, and the difficulty in being able to go back to the participants to check or test the theory generation.

Before embarking on the research, consideration was given to what questions should be developed to allow me to gain the information I wanted, but, being true to the grounded theory approach adopted, having open-ended, non-structured questions that were not based on any particular theme, with additional questions emerging, and being explored through *intensive interviewing* in subsequent interviews. In *constructivist* grounded theory, theorists are very conscious of language and discourse to encourage participants to be free with their ideas (Charmaz, 2014: 95) and I aimed for this approach. I also had to consider how I could avoid my own experience and preconceptions impacting on the interviews, the questions being asked, and the analysis phase of the study as an insider in School A (Anderson and Jones, 2000; Mercer, 2007), and the implications of the study taking place in my "backyard" (Glesne and Peshkin, 1992: 22).

### **6.3.3 Case study methodology**

This study uses a case study approach, which is where a specific issue/policy/phenomenon is explored in a specific location. In a case study the process is one of identification, description, analysis and theorising, which is in accord with the grounded theory method.

The case study approach does not demand one particular methodology but what is emphasised is the feature of looking "in-depth" at a 'case' (Chadderton and Torrance, 2011: 53). There is more emphasis on depth than coverage and so different methods can be

used. Researchers in the area of qualitative methodology have classified case studies in many ways. The classification, which fits with this research, is “instrumental” (Stake, 1994), which is investigating a particular theme and context to gain understanding. Investigating a theme in a case study demands collecting evidence. In case studies more than one source of evidence is advocated (Yin, 2009: 106; Chadderton and Torrance, 2011). For example, in the case study in School A, qualitative data was drawn from the semi-structured interviews from a range of participants, not just boys; and quantitative data (examination statistics) supplemented the qualitative data gathered. Other qualitative data was used to support the sampling of participants for interview. Observations, which are also advocated by Yin (2009), have not been used for any data collection due to the complexity of designing observations that would have addressed the question of validity. Access and time demands for such data gathering would also have been problematic.

Consideration was given to the advantages of the case study approach with data gathering through in-depth interviews rather through other means, for example, surveys, questionnaires etc. The perceived advantages were the authenticity of the real life context, the potential for generalisation, and the overriding advantage of the possibility of the outcomes of the research having a direct positive impact on educational outcomes for pupils through policy or interventions (Adelman *et al.*, 1980). Nisbet and Watt (1984) also point to the advantage of the specificity of the case study, which may not otherwise be captured in wider scale surveys. There are potential disadvantages such as not being able to verify the data gathered, and the potential for the researcher to display subjectivity that could impact on the data gathering and interpretation of the data.

The prescriptive definition of a research case study is shown in Table 6.1 and shows the key elements that would be expected.

**Table 6.1: Definition of a case study**

<p><b>An educational case study is an empirical enquiry which is:</b></p> <ul style="list-style-type: none"><li>• conducted within a localised boundary of space and time (i.e. a singularity)</li><li>• into <i>interesting</i> aspects of an educational activity, programme, institution, system or work of an individual</li><li>• mainly in its natural context and within an ethic of respect for persons</li><li>• in order to inform the judgements and decisions of practitioners or policy makers</li><li>• or of theoreticians who are working to these ends, and</li><li>• such that sufficient data are collected for the researcher to be able to:<ul style="list-style-type: none"><li>(a) explore <i>significant</i> features of the case</li><li>(b) create <i>plausible</i> interpretations of what is found</li><li>(c) test for the trustworthiness of these interpretations</li><li>(d) construct a <i>worthwhile</i> argument of story</li><li>(e) relate the argument or story to any relevant research in the literature</li><li>(f) convey <i>convincingly</i> to an audience this argument or story</li><li>(g) provide an audit trail by which other researchers may validate or challenge the findings, or construct alternative arguments.</li></ul></li></ul>
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(Bassey, 2012: 156)

This definition has been used as a framework to justify that the approach adopted was a case study. The definition gives the properties required of a case study to make it a worthwhile enquiry and all the properties were considered when carrying out this study. These points are explored below.

### ***Locality and time frame***

A case study approach was adopted in this research because of the uniqueness of the phenomenon: the *interesting* question that was apparent in School A. The case study is set in time and place and is bounded by specific characteristics, which in all of the case studies in this research were academically able pupils. The qualitative data was gathered in School A during one school session. However, this phenomenon of potentially able boys underperforming compared to able girls is not restricted to this one school. The issue is prevalent across Scotland and indeed in other developed countries. Therefore, two further schools were used as sites. The *locations* of the case studies were the school themselves. The method of selection of these schools is described in section 6.4.2.2. The collection of the qualitative data in these schools was carried out at the beginning of the following school session. The aim was to set the case studies in all three schools in a short and specific time frame for comparative purposes. The quantitative data examined was over a longer time frame to give a historical perspective and to consider any changes. Three case studies were ultimately carried out as explained earlier with the phenomenological paradigm as the basis of the case study approach.

### ***Natural context***

The case study is not abstract but based on real life situations, with people in real contexts (Cohen *et al.*, 2011), in this case a secondary school setting within a particular locality, society and a culture of advantage. Hitchcock and Hughes (1995) and Bassey (1999) highlight that case studies are about actors and their perceptions of events. The social interactions are highlighted as being integral to a case study (Chadderton and Torrance, 2011). The case study enables participants to be able to voice views about their own lived experiences (Geertz, 1973), which is central to this study.

### ***Informing other practitioners***

The case study approach allows depth to produce ‘thick descriptions’. Thick descriptions are more than facts, they give patterns and concepts that have been inferred from relationships in cultural and social settings within a specific context (Holloway, 1997). Thick descriptions are interpretative and provide sufficient meaning in a particular context to allow those external to that context to make sense of the context or phenomenon (Geertz, 1973). Lincoln and Guba (1985) suggest that thick descriptions allow external validity to be achieved. The information arising from the case study gives enough detail of the issue or phenomenon being explored to consider transferability to other contexts. Transferability of findings from a case study is a contested area.

Some researchers, for example Creswell (1994), would argue that the case study is the study of one phenomenon and cannot go beyond that one context, in this case exploring the pupil experiences and attitudes in School A, because of the importance of context and culture in shaping experiences and attitudes. Others, for example Yin (2009), do not hold to this rigid definition of a case study and believe that the findings from a case study can go beyond the particular context. Yin (2009) is an advocate of generalisation but only as a step to broaden any explanation of the phenomenon or question under investigation, rather than to go immediately to universality. Other researchers, for example Verschuren (2003), argue that both stances are possible and it depends on the question under investigation. The ambition for the case study approach in this research is to provide thick descriptions of why academically able boys appear to perform less well in external examinations. This study is to ultimately support other practitioners in the field (Bassey, 2012) hence the study was broadened to two other schools to consider transferability (Dimmock and Lam, 2012).

### ***Sufficiency of data collection***

The case study demands that enough data is collected for patterns to emerge and



interpretations created, to make sense of the data and to give reliability and validity. To meet the challenge of looking in-depth within each context as part of the case study approach, interviews were carried out not just with boys. The aim was to learn from the perspectives of others involved in or associated with the learning of boys about what supports or hinders learning in each of the three schools. Seeking views from the different participants in each school gave an opportunity to triangulate findings within each school and was an attempt to give internal validity to the qualitative data. For there to be “plausibility and credibility” (Hammersley, 1992: 70) enough evidence must be available to be convincing of the theory. Collecting enough data can be a challenge: particularly in deciding what is sufficient. The decisions taken about sampling and the importance of considering saturation are considered later in this study (sections 6.4.2 and 7.2.5).

### **6.3.3.1 Validity, reliability and triangulation**

Validity and reliability are important if the research is going to have worth.

#### ***Validity***

Validity is the term used to ascertain whether the research accurately portrays or explains the phenomenon that the research is exploring. This is in relation to all aspects of the research: the methodology, analysis and interpretation (Bush, 2012). Validity in qualitative empirical studies is described by Hartas (2010) as “a criterion for the integrity of a study in terms of accuracy of inferences and the trustworthiness of results” (Hartas, 2010: 451).

Validity in this study was considered through the lens of the principles of validity in qualitative research outlined by Cohen *et al.* (2011: 180). The context, the role of the researcher and the collection of data were all considered. To examine the particular question with participants in a setting, the context should be their own natural setting (Cohen *et al.*, 2011: 180), in this case a particular school. In this type of research, the role of the researcher is integral with the research being carried out: being the research tool (Cohen *et al.* 2011: 180), and the complexity and challenges that this brings with it are discussed in a separate section (6.3.3.2). The complexity and challenges are also associated with drawing data from those ‘living’ within that context (Davison, 2004) and having sufficient data for saturation; taking an interpretive stance through developing thick descriptions, seeking meaning from the perspective of the participants; and interpretation grounded in the data rather than *a priori* theories being used, which is the stance taken in these case studies using the grounded theory approach.

For the case study approach, the types of validity that have been considered are *internal validity*, *concurrent validity* and *convergent validity* (Cohen *et al.*, 2011). *Internal validity* demands that the inferences and conclusions are drawn from the data in a consistent way. This was assured by the scrupulous methods used for sampling, interviewing, and analysis of the data, which also meets the demands of *reliability*: “replicability and internal consistency” (Cohen *et al.*, 2011: 295). *Concurrent validity* is pertinent in this study because of the data being collected from different sources. This was addressed through seeking views of different groups within the school to triangulate the perspectives of the boys and to achieve *convergent validity*, being scrupulous and consistent with the methods of collection of the qualitative data.

Two of Maxwell’s (1992) types of validity are particularly pertinent when considering the grounded theory method. *Interpretative validity*, which is sense making that is true to the data and the means of data analysis, in this case the views of the participants and the grounded theory approach; and *theoretical validity* which goes beyond interpretation to explanation of the phenomenon. Being scrupulously objective in gathering data and being very aware of the danger of “selective reporting” (Nisbett and Watt, 1984: 91) were key considerations.

### ***Reliability***

One of the issues Bassey (2012) highlighted was that of ‘reliability’ in relation to the case study. Reliability is how dependable, reproducible and consistent the explanations are in other contexts and with other subjects. Where an explanation is ‘reliable’ the expectation is that there would be similar results if the research were carried out in other settings.

Reliability in qualitative research is contested. This arises from the qualitative research of this type being unique and dependent on the context and so replication is not possible.

Lincoln and Guba (1985) prefer the term ‘trustworthiness’, or similar, because the case study is a singularity and so there is the issue of replication in only studying the one context. However, if all the necessary steps are taken to guard against bias and ensuring research integrity, triangulation and developing rapport (Dey, 1999), the data can demonstrate *reliability* within the one context, in this case School A.

For reliability, it is important to be rigorous in sampling. One area that is contentious is in interviewing in a way that assures reliability. The need to ensure reliability through rigid structuring of the interviews, with the same questions and order of questions (Silverman,

1993), contrasts with the need for opportunities for participants to share their views in a way that is not constrained by the questions being asked, or the formality of the interview (Scheurich, 1995), which is how the interviews in this study have been conducted. To reduce lack of reliability, care was taken to ask the same open-ended questions, with judicious use of supplementary questions: prompting and probing questions (Coleman, 2012) and avoiding leading questions. The careful choice of questions and protocol of asking the questions, for example keeping the atmosphere informal, considering the ‘audience’, use of vocabulary, and careful use of body language and cues, was intended to obviate the reliability issue as far as possible. The most important aspect was that the participants understood the questions. Careful analysis and interpretation of the data through consistent coding is also a prerequisite, particularly with the ongoing analysis demanded of the approach to grounded theory used here, and the theoretical sampling in subsequent interviews.

One of the key aspects in ensuring validity and reliability is the role of the researcher, and recognising that the researcher is an integral part of the research, with the potential of the status of the researcher influencing the data gathering from the participants.

### ***Triangulation***

Triangulation in the context of qualitative methodology is to “explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint” (Cohen *et al.*, 2011: 195). Cohen *et al.*’s standpoint is of using more than one methodology. Somekh and Lewin (2011: 330) give a definition of triangulation, which is adopted here where data is gathered from different perspectives. For this reason, triangulation of evidence (Lincoln and Guba, 1985; Cohen *et al.*, 2011; Somekh and Lewin, 2011; Bush, 2012) has been a feature of this study, by seeking data from groups of girls, teachers and parents in School A, and groups of boys, groups of girls and teachers in Schools B and C to “confirm trends and identify inconsistencies and an improvement in the reliability and validity of findings” (Weyers *et al.*, 2011: 210). Triangulation also potentially guards against researcher bias (Lincoln and Guba, 1985).

#### **6.3.3.2 Researcher as research ‘tool’**

There are criticisms that could be levelled at interpretivism when considering the ‘reality’ of different people’s perceptions of the world, and the challenge of how these different ‘realities’ can be interpreted to provide patterns. This is equally true of the researcher as

well as the participants. The researcher is the research tool in grounded theory and there is a reliance on the researcher's ability to conduct the gathering of data, in this case through the interviews in all three case study schools. Being the researcher and involved in seeking this reality is not without its problems as the type of data gathering from interviews with social actors can change that reality, as the researcher is part of the research rather than being divorced from the participants. The people who are offering their views or perceptions may not understand what is influencing them because it is the 'norm' for them (Cohen *et al.*, 2011). There is also the assumption that the participants will be able to describe in concrete terms their world and how they feel, for example, what motivates them, and what the barriers to their learning are. Some of the questions are expecting abstract concepts to be discussed, which may be a challenge for some participants.

When working with pupils in this way, seeking perspectives on their lives, and the pupils talking about themselves, there is a desire for authenticity. This comes with the understanding that to be effective as the researcher, being the 'research tool', there must be rapport to develop relationships founded on strong values and moral judgment (Starratt, 2007). It is one of the criticisms made by Dey (1999), who has reservations about data collection where rapport is not present. This could be considered an issue the case in Schools B and C where the participants did not know me.

In an interview situation there are boundaries or "border-making" created between the interviewer and interviewee (Gubrium and Koro-Ljungberg, 2005: 689). These researchers highlight five key boundaries that are created by the nature of interviews: *control*, for example the choice of setting, the choice of questions, when the interview begins and ends; *agendas*, both the research agenda and the agenda that develops during the interview; *language* and how this can influence what is interpreted and understood; *roles and interactions* between the interviewer and interviewee with the importance of understanding the power dynamics and the unequal power attributed to the roles that influence the response of the participants (Cohen *et al.* 2011: 205-6); and *socialisation* with the "multiple selves negotiated" (Gubrium and Koro-Ljungberg, 2005: 700) in this type of setting.

In this case, the perception of power could come from the status of Head Teacher but equally as the researcher. Being aware of these aspects of 'border making', gives the researcher the opportunity to minimise the impact that these could have on the qualitative data collected. Reflecting on the boundary created by power, Dentith *et al.* (2009) suggests

a participative role for the participants through establishing an environment that builds a sense of their role in and importance to the research, with the researcher being conscious of reducing his/her own “subjectivities” (Dentith *et al.*, 2009: 163), and having an understanding of the participants’ world, in this case pupils, teachers and parents. As a head teacher interviewing pupils, teachers and parents I was conscious of the potential of this being a factor and being aware, for example that there might be ‘acquiescence’ (Breakwell 2000), participants agreeing even if this was contrary to what they themselves thought. This could be the case in the individual interviews but also in the focus groups when there were points being made that participants were not in accord with but they acquiesced. Having the expertise of working in interview situations, the skills of questioning, and analysis to make reasoned deductions and conclusions (Yin 2009: 70) particularly with pupils, and providing the ‘safe space’ to share views and thoughts confidently, are all important considerations.

### ***Insider status***

This then brings into question the issue of ‘insider’ status as Head Teacher in the case of School A, unlike the other two schools. All of the points above apply but in addition the issue of being known to the participants in the case study School A could be thought to challenge the validity and reliability of the data gathered. How the participants would respond to the insider, rather than someone independent of the school, could be considered problematic. The research evidence to claim the veracity of this supposition is not strong and Mercer (2007) in her research in this area did not find any definite evidence to say that the insider would cause bias in the data collected. She explained that being an ‘insider’ or an ‘outsider’ did not just depend on where the research was being carried out but suggested that being on the insider/outsider continuum can alter depending on the relationship with the participants and what is being discussed, seeing the status as being fluid and changing.

There are advantages to being an insider: access to participants and other data relevant to the research; more likelihood of having effective relationships with the participants; and a shared frame of reference (Mercer, 2007). On the other hand, the shared background could influence the researcher. To counteract this the researcher needs to step outside of this insider persona, to remain objective (Charmaz, 2014), and Mercer (2007) stresses the importance of not sharing ideas or opinions in the interview. The researcher must also make a conscious effort to remain objective when analysing data and in subsequent theory construction (Charmaz, 2014). Collecting sufficient data and using sites other than School A allowed the findings to be analysed and scrutinised for any obvious bias (Chapter 9).

The insider status was also an advantage in seeking access to other schools through being able to seek support from peer head teachers. Working as an insider in the case study school A as Head Teacher, I was able to be confident in the rigour of the sampling process to ensure randomisation and diversity in the groups as prescribed, increasing the chance of validity. One of the challenges of going into other schools is not having control over the selection process, relying on others to provide the participants.

#### **6.4 Methods employed to gather qualitative data through interview**

In any study where subjects are required for interview, the key considerations are the cost, time limitations and the access to the subjects (Cohen *et al.*, 2011). Unlike quantitative sampling where it is important to seek a representative sampling of the population under study (Lewin, 2011: 222), in qualitative sampling this is not the case because of the likely “uniqueness” of the phenomenon for the individuals involved, who are giving their views about their own experiences (Cohen *et al.*, 2011: 161). In School A, there was access but there were some time limitations. The prime subjects in this study were the boys in School A. The aim was to draw as comprehensively as possible from their perspectives in relation to their learning and to consider the principles of grounded theory in establishing the number of interviews required. Using grounded theory there is the issue of saturation (section 7.2.5), having enough interviews to develop concepts and categories that more interviews would not significantly alter. Those selected from the academically able boys were those who were high attaining and those who had the potential but who were apparently underperforming. Girls were drawn from the academically able group. Random sampling within the particular group of academically able pupils was used.

Drawing from across the curricular areas, individual teachers in School A were also interviewed individually as were a small number of parents. It was felt that interviewing parents in groups could have been problematic because they may not have known each other. Teachers were volunteers. Random sampling was used to invite parents.

Group interviews were used in Schools B and C because pupils and teachers in these schools did not know me, and not having any sort of relationship with them may have limited the authenticity of responses and could also have put undue pressure on these pupils. The sample size selected in these schools was between six and eight (Fowler, 2009).

In the following sections, the process and the methods used for sampling the participants in the study, including the ethical considerations, the settings for the interviews, the interviews themselves and the questioning techniques used, are described.

#### **6.4.1 Ethical approval**

Methodology that involves seeking views from pupils, teachers and parents through personal interviews, whether individually or in a group, is subject to ethical guidelines both morally and as a requirement of the research organisation. To gather data in this way is predicated on being able to work collaboratively with the participants involved in the research, the researcher being the research tool discussed earlier. Bias on the part of the researcher and the status of the researcher, particularly the insider status, which has been rehearsed earlier in this chapter, is an important consideration. The overwhelming consideration is that the participants feel safe and free from harm.

There is also the integrity of the research to consider in terms of the method of selecting the participants, the engagement processes with the participants, where trust and respect are a fundamental requirement, and the protection of the data collected (BERA, 2011). The three key requirements that must be adhered to are informed consent, confidentiality, and the impact of the interviews (Kvale, 1996: 111-120). The checklist given in Cohen *et al.* (2011: 442) was used to ensure all ethical issues were considered. The researcher must make the case for the gains for the participants and/or society more generally (BERA, 2011).

Complying with the University of Glasgow's mandatory requirement for carrying out research involving human subjects, two application forms were submitted to the College of Social Sciences Ethics Committee, one for the first phase of the research within School A, and the second for the second phase where two other schools were used as test sites. The application included providing a justification for the research; written permission to seek access to the participants from both the local authority and the host schools in the case of Schools B and C; how these participants would be selected; how the data would be collected from participants; the method of data handling to ensure confidentiality as well as the safe data storage and disposal. For ethical approval it was necessary to assure the Committee that the participants would be willing volunteers who were fully aware of the nature of the research, and the boundaries of confidentiality and anonymity placed on the research, as well as the subjects knowing that they could withdraw from the process at any

time. Assurances were given that all participants would be bound by a code of anonymity, even in the event of something said being referred to in the thesis, and in the handling of data to ensure no breach of confidentiality. Participants put their trust in the interviewer and this trust must not be breached. Appendix 9 gives a sample of the Plain Language Statement and the Consent Form that were issued to all participants. (The parents were asked to sign when the young person was under the age of 18). In addition, I complied with the *Protection of Vulnerable Groups Scheme* (the PVG Scheme) introduced by the *Protection of Vulnerable Groups (Scotland) Act 2007* (Scottish Parliament, 2007) by having a Disclosure statement (a mandatory requirement in Scotland) authorising work with children/young people. (It should be noted that none of the young people involved in any of the interviews had mental health difficulties or disabilities.)

The following sections give details of the key areas required for ethics approval notably the method of sampling for the participants in School A and the other schools involved in this study, the process of data collection and the method of analysis of the data.

#### **6.4.2 Sampling - Selection of participants**

One of the key principles of the grounded theory approach adopted is ‘intensive interviewing’. This process is where the interviews are analysed as soon as possible after each interview, where practicable, and concepts emerging from interviews are sampled in subsequent interviews. This ongoing analysis of the data is continued until “saturation point” (Kvale, 2007: 44) or redundancy is identified: where no new major concepts are emerging (Glaser and Strauss, 1967). The aim would be to continue with the interviews until this point had been reached. This process sets the number of interviews to be carried out. In all three schools this ideal pragmatic model, of continuing with interviews until saturation had been reached, was not possible, partly because of the restriction of access to participants and also time constraints. (Section 7.2.5 outlines the key principles of saturation as part of the process of analysis, and the rationale for the number of interviews selected.)

To collect the qualitative data in School A, eighteen individual boys were interviewed, with the rest of the participants interviewed in groups. Although these groups were homogeneous: pupils, by age and gender, and being from the same school; and the teachers all being from the same school, I was also keen to have some diversity in the groups to give an opportunity for differing views (Krueger et al, 2000). Related to the question of



performance against underperformance, the diversity in the groups of pupils was the mix of those successfully attaining and those who had potential but who were believed to be underperforming. Seeking only participants who were potentially academically able could be criticised but this view is defended because of the specific nature of the enquiry (Noble 2005: 133). The teachers' groups in Schools B and C also had some elements of diversity: gender and subject.

#### **6.4.2.1 In School A**

In School A, contributions were sought from a range of stakeholders: pupils, teachers and parents. The key participants in this study were the pupils themselves. With the significant differential between the attainment of the academically able boys and girls as discussed in Chapter 2, there was a strong focus on seeking views of boys.

##### ***Individual boys***

In the first instance, the aim was to select a number of boys to be interviewed individually who were in the academically able group. 18 boys in total were selected from three year groups, the last three years of secondary schooling in Scotland: Fourth Year (S4), Fifth Year (S5) and Sixth Year (S6). These year groups of S4, S5 and S6 were all years where the pupils were taking examinations at the end of the year (Credit/Intermediate 2 (S4) or Higher level (S5), the most demanding levels of study in the year groups indicated).

This research study began in the autumn of 2012 when the examination data was already available for S5 (Credit and/or Intermediate 2 level) and S6 (Credit and/or Intermediate 2 level and Higher level) and so it was possible to use this data to establish those who had been presented for three/four/five Highers and to identify those who had achieved passes and those who had not. (The data was also supplemented by teachers giving a view on whether a boy was achieving or underachieving.) The S4 pupils were expected to sit their examinations in May 2013 and so predicted grades were allocated, as there was no external examination evidence as there was for pupils in S5 and S6. Expected levels of attainment for S4 pupils was regularly gathered, as a matter of course, from all teachers and so it was possible to provide a list of those who were on target to achieve and those who were not on target. This grade was based on attainment data gathered internally, and on the teacher's judgment of the demonstrated ability of the pupil in classroom formative assessment, including engagement and depth of responses in learning settings. This evidence did rely on the quality of the teacher judgment but every effort was made to develop a predictive

system that was as reliable as possible. This was supported by moderation of a teacher's judgment through discussion with the principal teacher and scrutiny by the principal teacher of expected grades allocated by each teacher. The allocated grades for each pupil were examined at whole school level, comparing and contrasting across subjects, and any anomalies were investigated. (The school Management Information System gave an overview of a pupil's progress at regular intervals to allow this type of analysis to be carried out.) Additional information about a boy's personal profile was also checked for behaviour etc. to ensure that the boys being interviewed did not have any particular issues, and so no obvious disadvantages, that could have skewed responses. The individual boys had similar profiles.

Random sampling was used to select the 18 boys. The aim for the research was to achieve a mix and a balance of those boys who were attaining highly and those who were considered to be underperforming with the balance being more towards those who were believed to be underperforming. Matched sampling was also taken into consideration (Stuart, 2010) with the groups being as closely aligned as possible in all but the variant of attainment, which was achieved through examining a boy's personal profile as mentioned above. Two groups of boys were listed: those who had already demonstrated academic ability, or were on target to attain highly, and those who were considered to be underperforming. Each boy was given a number and the boys were selected at random using a randomised number generator<sup>28</sup>. Of the 18 boys selected the balance and mix is shown in Table 6.2 below. Each boy was given an anonymous code from B1 to B18. This was to comply with the ethics approval of having anonymised data that could not be linked to any individual.

The aim when interviewing the boys and collecting the data was not to try to differentiate responses of these two groupings of boys. The boys were not seen as two distinct groups but a continuum from underperforming to highly performing and to try to differentiate would have been false and could have introduced an unnecessary bias. It would also have been difficult to establish robust criteria to differentiate between the two groups. The interviews were with boys to explore their attitudes and experiences in relation to their learning and not to ask questions about what could be influencing their performance in examinations or assessments. (This was emphasised as part of the ethical approval.)

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<sup>28</sup> ([www.randomizer.org](http://www.randomizer.org))

**Table 6.2: Boys selected for individual interview in School A**

<b>S6 U*</b>	<b>S6 A**</b>	<b>S5 U</b>	<b>S5 A</b>	<b>S4 U</b>	<b>S4 A</b>
B1***	B5	B8	B12	B14	B17
B2	B6	B9	B13	B15	B18
B3	B7	B10		B16	
B4		B11			

\*Pupils who were ‘underperforming’

\*\* Pupils who were high attaining

\*\*\* Code allocated to identify subject

### ***Focus groups of pupils***

As well as individual interviews, this study further explored the views of boys in the school through interviewing groups of boys to consider reliability and reproducibility through triangulating key concepts, as well as seeking additional concepts. Groups of girls were also interviewed to consider their views on learning and to compare any gender related issues or perspectives. The single sex groups of boys and girls were selected from each of the three year groups. S4, S5 and S6.

The method of selection was the same using the randomised number generator with a mix of attaining and underperforming. The distinction between these two groups has not been made in the table and this was not recorded anywhere. Again this was to achieve a balance of pupils. The aim of the group interview was to allow the pupils to share views and interact freely. The open-ended questions described later were not focusing on underperformance, to avoid any negative connotations, but on learning more generally and trying to capture any ontological themes.

Table 6.3 below shows the number in each group. The aim was to have a group size of approximately six (Fowler, 2009). This was not too large to be unmanageable; it gave each member an opportunity to share their views without the group being too large; and it was large enough for members not to feel exposed. The process of selection meant the final group size was governed by those who accepted the invitation to attend, hence the different groups sizes.

**Table 6.3: School A – Groups interviews**

	<b>S4 (Girls group)</b>	<b>S4 (Boys group)</b>	<b>S5 (Girls group)</b>	<b>S5 (Boys group)</b>	<b>S6 (Girls group)</b>	<b>S6 (Boys group)</b>
Number of participants in each group	6	5	6	8	4	4

***Teaching and Support Staff***

To gain the perspective of practitioners in the school, I interviewed 13 teachers individually from different subject areas and one member of the support staff. The process for securing volunteers was an email sent out to all members of staff of the school to explain the purpose of the study and to seek notes of interest. Those who volunteered did so willingly. The staff were a mix of teachers and Principal Teachers<sup>29</sup>, and the member of the support staff was a support assistant working throughout the school in classrooms as a support for pupils with identified learning needs. The subject and/or areas of responsibility and gender are shown in Table 6.4 below:

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<sup>29</sup> Teachers in promoted positions leading other staff. The Principal Teachers interviewed were a mix of those with responsibility for learning and teaching, specific subjects in the curriculum as well as a role in pastoral care, and those with specific responsibility for supporting pupil's pastoral needs.

**Table 6.4: Staff interviewed in School A broken down by subject and gender**

<b>Faculty Areas</b>	<b>Staff's position</b>	<b>Gender</b>
English	Teacher	Female
Modern Languages/ Religious and Moral Education	Teacher	Female
Art and Design/ Music	Principal Teacher	Male
Health (Physical Education (PE)/ Home Economics	Teacher	Male
Health (Physical Education (PE)/ Home Economics	Teacher and Principal Teacher of Pupil Support	Male
Social Subjects	Principal Teacher	Male
Social Subjects	Teacher	Female
Social Subjects	Teacher and Pupil Support Teacher	Female
Mathematics	Principal Teacher	Female
Science	Teacher	Male
Technology (Technological Education/ Business Education)	Teacher	Male
Technology (Technological Education/ Business Education)	Teacher	Male
Technology (Technological Education/ Business Education)	Teacher	Female
Pupil Support	Support Assistant	Female

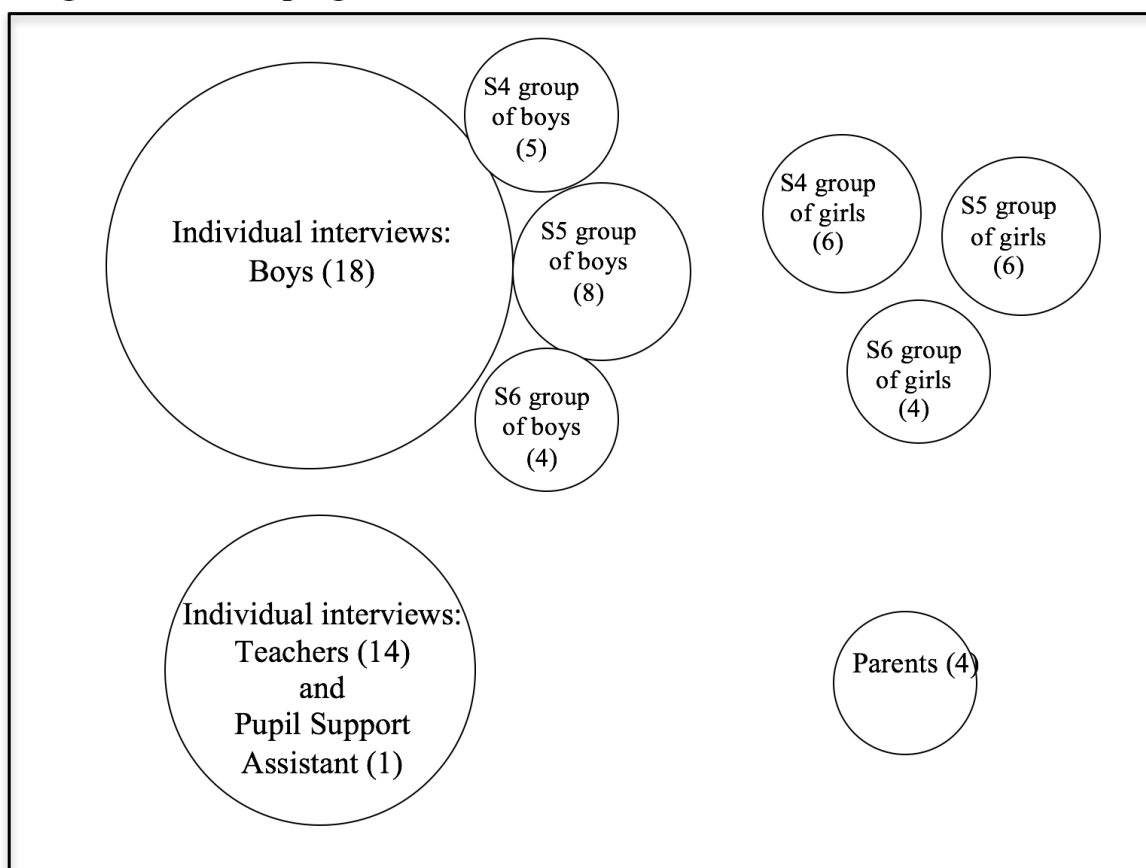
The aim was to try to have all learning and teaching teams in the school represented, with a wide spread of curricular subjects, some dedicated pupil support staff and a balance in relation to gender to give as wide a set of professional experiences and expertise as possible. This number of staff also gave some confidence that saturation would be reached.

### ***Parents***

In recognition of the role that parents play in the learning and attainment of their child (Harris and Goodall, 2007; GEMS Education, 2010; Goodall and Vorhaus, 2011; Aston and Grayson, 2013), parents were asked their perceptions of their child's learning. The aim was not to link parents' responses with those of their children. The rationale for inclusion of parents was to triangulate the parents' views with those of the boys and to identify any commonalities and differences of perspective, and to note any other key themes. A similar process as described for the individual boys was used with parents. Parents were selected at random using a randomised number technique from a list of the individual boys

interviewed. Of the parents invited by letter to participate, four parents volunteered and were interviewed. Fig 6.1 below gives an overview of the interviews carried out and the number of participants involved.

**Fig 6.1: Interview programme in School A**



**NOTE: the numbers in brackets shows the number interviewed**

#### 6.4.2.2 In Schools B and C

In this second phase of the research, two schools within School A's comparator group were selected from the data supplied by ScotXEd. Schools selected had similar demographics. School B was selected from the same local authority as School A and had a similar gendered attainment profile. School C was from another local authority but had a different gendered attainment profile. The case studies in Schools B and C were not as extensive as the case study in School A. The purpose of using these two test sites as case studies was to give a wider perspective on the emerging findings from the case study in School A, and to consider transferability and generalisation related to pupil experiences and attitudes. It must be noted that the smaller number of participants involved in these schools could only lead to tentative conclusions (Bassey, 2001).

In Schools B and C, groups of pupils and a group of staff were selected for interview. It

was decided not to interview parents, because unlike the individual boys interviewed in School A whose parents were sampled for interview, in Schools B and C only focus groups of pupils were used, and accessibility to parents was likely to have been problematic. In Schools B and C two groups of boys and two groups of girls were selected: groups from S5 and S6 as in School A. S4 pupils were not interviewed in Schools B and C. There were two reasons for this. Firstly, to control some of the variants it was decided to interview pupils in the same year groups in all schools. This meant that any local authority policy would have had the same effect on Schools A and B and national policy on all three schools. These pupils would have been through the same length of school experience and be following a similar programme of study and examination diet. S4 was omitted in Schools B and C because time had elapsed between the interviews in School A and those for the other two schools. By then the next school year was underway. This meant that those who would have been interviewed at the same time as pupils in School A were now in the year above. The pupils who would previously have been in S6 had left school and so were not available for interview. Secondly, a significant shift in curriculum, learning and teaching and assessment in the form of *Curriculum for Excellence* has been happening in Scotland and the new S4 would have been the first cohort to follow this new curriculum. Therefore, to include them might have compromised validity.

A letter giving the criteria for selection for high attaining pupils and those who had the potential to attain highly in S5 and S6, was sent to the head teachers of the two schools to support selection of pupils for interview, again emphasising the random sampling as well as only seeking participants who were willing to be involved. The teachers were invited to volunteer. The gatekeeping for the process and the random selection of the pupils rested with the school. All consent forms were checked and the conditions of the interview were rehearsed with the participants before the interviews to ensure that all were happy to be involved.

Tables 6.5 and 6.6 show the number of pupils involved in the group interviews in Schools B and C respectively. Note the group size was determined by those who had accepted the invitation to participate – coincidentally the groups were the same size in each school.

**Table 6.5 School B – School with similar demographics and attainment profile**

	<b>S5 (Girls group)</b>	<b>S5 (Boys group)</b>	<b>S6 (Girls group)</b>	<b>S6 (Boys group)</b>
Number of participants in each group	6	5	5	3

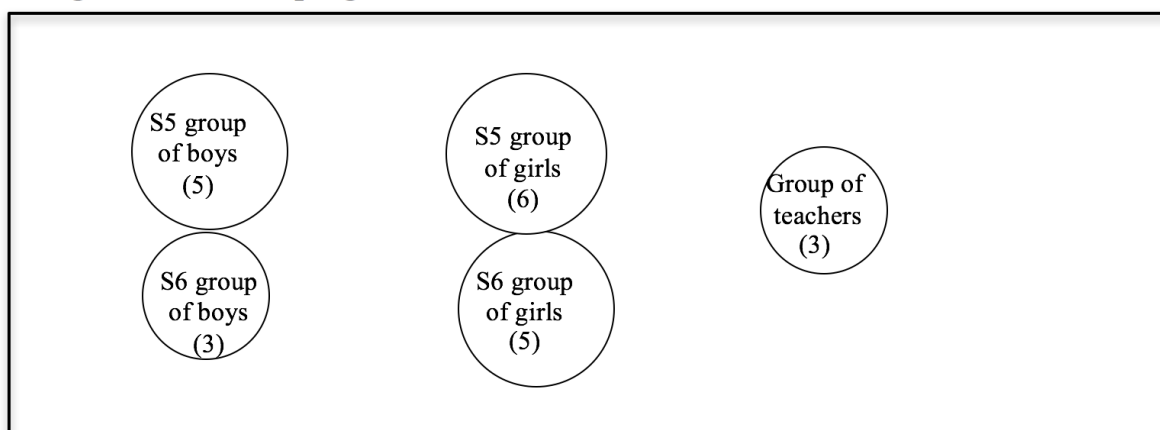
**Table 6.6: School C – School with similar demographics and a different attainment profile – no difference between the attainment of boys and girls**

	<b>S5 (Girls group)</b>	<b>S5 (Boys group)</b>	<b>S6 (Girls group)</b>	<b>S6 (Boys group)</b>
Number of participants in each group	6	5	5	3

Three teachers were interviewed in School B (two males and one female). Three teachers were also interviewed in School C (one male and two females). The number of teachers interviewed was at the discretion of the school, up to a maximum of five. Teachers from both schools were interviewed in groups. The aim in relation to these schools was to have different subject disciplines. However, the evidence from analysis of the teacher interviews in School A did not give concepts related to particular subject disciplines that suggested a need to have specific parts of the curriculum represented. The smaller number of teachers is justified as the case studies in Schools B and C were to consider if transferability could be considered viable. Confirming or refuting the broad categories was the aim rather than a study on the same scale as in School A. Similarly, gender of the teacher in terms of responses did not show any major differences, but a gender mix was used in both schools to give representation. Fig 6.2 gives an overview of the interviews carried out in Schools B and C. Coincidentally, the number of boys, girls and teachers in each of the focus groups Schools B and C was the same.



**Fig 6.2: Interview programme in Schools B and C**



**NOTE: the numbers in brackets shows the number interviewed in each group**

For all interviews, permission was granted by the local authorities of the schools involved. The head teachers of Schools B and C granted permission for me to conduct interviews with pupils and staff. Every participant was given a Plain Language Statement and a Consent Form, and in addition a covering letter for parents was included for the pupils. It was explained clearly that participation in the interviews was voluntary and withdrawal could take place at any time. Confidentiality and anonymity was emphasised. Permission was also sought for audio-taping.

### **6.4.3 Interviewing**

The sampling method in this study was by interview. “The interview is a critical strategy in generating intersubjective features of the public and private spaces of social life” (Schostak and Barbour, 2011: 65). However, it is critical that the qualitative researcher does not simply see the interview as a means of gathering data but that the interview is a “social, interpersonal encounter” (Cohen *et al.*, 2011: 421). Interviews are useful in gathering qualitative data because they give deep and rich information about personal experiences and a perspective of an individual’s lived experiences (Chadderton and Torrance, 2011) allowing the researcher insight into the participants’ world (Coleman, 2012).

The interview is a “social encounter” and depends on the interaction between interviewer and interviewee. (Barker and Johnson, 1998: 230). Schostak and Barbour (2011: 61) talk about the “messiness” of working with participants. The demand is on the interviewer to be fluid and flexible in managing this messiness, and using this to advantage, in loosely structured interviews, by allowing the conversation to flow, and encouraging free ranging

views to be shared. The interviewer must be aware of the ‘performances’ within any interview situation, and how different participants act in the interview, particularly the relative interactions between members of a group being interviewed. To have a productive interview, where views are shared and discussed, depends on the commitment of those involved. This is partly obviated by the ethics demand for willing volunteers and respecting the right for participants to withdraw. The methods used by the researcher to “unearth the truth” are also key considerations. An additional challenge is the power that the interview can place on the researcher, which can influence the trust that lies between those being interviewed and the researcher. The onus is on the researcher to be aware of these issues and to provide an environment that minimises these risks. Interpretation of the data, to seek meaning of what has been said, is also challenging (Schostak and Barbour, 2011: 62). The ‘accuracy’ of the data is very much governed by the skill of the interviewer and the values of the interviewee: their honesty and willingness to be involved. The researcher is aiming for authenticity and to uncover what is unspoken. Using a grounded theory approach with a few broad open-ended questions can facilitate discussion and conversation.

#### **6.4.4 Interviewing process**

The aim for the interviews was to give participants the opportunity to speak openly and freely about their own learning, to reflect critically on their experiences in a supportive environment, and to come to a greater appreciation of their own learning and influencing factors.

##### **6.4.4.1 Interview protocol**

Consideration was given to the setting of the interviews, which offered a relaxed and quiet environment. For all interviews the setting was in a neutral venue in the school – a meeting room provided by the school.

To comply with ethical protocol, before interviewing the contents of the Plain Language Statement and the Consent Forms were rehearsed with all participants to make sure that all were clear about the research and had an opportunity to ask questions and to withdraw if they wished. All were willing to take part. The questions that would be asked were outlined. The method of capturing what was said was explained: audio recording and note taking.

It was also explained that the interview was not expected to last for more than 30 minutes. This limited period was to ensure participants did not feel overburdened or stressed by the experience but relaxed and happy to contribute. Although this notional time limit was placed on the length of the interview, the interview was not restricted if the participant(s) needed more time. Conversation was allowed to flow freely.

#### **6.4.4.2 Focus groups**

The main purpose of focus groups in this study was to triangulate the findings from the individual interviews of the sample of 18 boys, and, in the case of the boys' focus groups, to see if there were any additional concepts that the groups mentioned that had not been brought up by the individual boys.

Focus groups are beneficial because group members might feel more confident about expressing their views in a group rather than in a one-to-one interview situation, and furthermore might voice views in a group that individuals would not voice if on their own, particularly where there is no relationship between the interviewer and the interviewees as in School B and C (Coleman, 2012). Having several groups is suggested (Cohen *et al.*, 2011). The size of the group is important – too small and there may be no or little interaction: too large and the group might become difficult to manage. The aim in this study was to have six to eight in a group (Fowler, 2009) but was dependent on the response to the invitation to participate, particularly in Schools B and C.

For a focus group to be effective and ensure that the discussion is relevant, it is important that all in the group have the same characteristics, and “identify with each other” (Coleman, 2012: 255). In this study, this is the case for pupils because the groups were made up of those pupils who were academically able and all from the senior school. All the teachers had the same characteristics, they were connected by their common experiences of and interest in learning. Cohen *et al.* (2011) suggest that, other than for groups of children, it is better if a group is not made up of friends, which is not easy to accommodate when interviewing groups of pupils from the same year group, and teachers within the same school. However, being alerted to this allows interactions to be monitored for bias and dominance.

Focus groups are more than group interviews in that they give an opportunity for the participants to interact, discussing a particular topic to give a view that is based on the

views of the group rather than on any individual. The researcher's role is to create the opportunities for the participants to share their views (Cohen *et al.*, 2011). Giving space and time for views to emerge is important, as is recognising that the discourse is between members of the groups as much as it is with the researcher (Schostak and Barbour, 2011).

Focus groups as a vehicle for gathering data are useful because they can gather this quickly, saving time, compared to a larger number of individual interviews. This can also be an advantage when working within a limited time frame. This was the consideration when carrying out the interviews in Schools B and C.

Focus groups are not without their challenges. Ensuring authenticity of views in group interviews can be demanding. For example, group interaction can challenge the validity of the views (Schostak and Barbour, 2011: 64): the social positioning that individuals have in a group discussion must be considered (Brannen and Pattman, 2005), as must the interactions (Grønkjær *et al.*, 2011). Also, in the case of the individual the knowledge, attitudes and perceptions come from the individual alone. However, in the group situation knowledge can also be created through the social interactions of participants. (Kitzinger 1995). Halkier (2010), advocates that the way the group interacts socially must also be taken into account when analysing the data.

In my study, I considered the conversation analysis used by Grønkjær *et al.* (2011: 19) in their research: “adjacency pairs”, “preference organization”, “account” and “repair”<sup>30</sup> developed by Potter (1996), and the events found by Grønkjær *et al.* (2011: 19) of

...negotiating and constructing normality in interaction, disagreement and/or consensus, homogeneity and the impact on interaction and content, and coming to and making sense of a dead-end (including the risk of hierarchical issues).

**...negotiating and constructing normality in interaction:** In group interactions when discussing a topic, there may be differing views as the participants are in discussion, going through the points raised. There can come a point when agreement is reached through a

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<sup>30</sup> *Adjacency pairs*...can be thought of as the basic glue of conversation...many actions in conversation are linked together...for example between questions and answers. ...adjacency pairs involve *preference organization*...to a particular utterance, there is a preferred response (i.e. acceptance or agreement) or a dispreferred response (i.e. rejection or disagreement). A particular feature of adjacency pairs is the *account*. An account concerns the justifications behind the decisions, opinions and actions that participants express in the focus groups... In some cases, the process of building accounts and descriptions involve *repair*. Repair is often used in focus group interaction and is concerned with how participants repair their own and, more delicately, others' talk (Grønkjær *et al.*, 2011: 19).

*negotiating* process. The role of the interviewer in this situation is important: the interviewer should avoid comment, but through body language, or seeking expansion of views or summarising, keep the conversation flowing during the negotiation phase.

**...disagreement and/or consensus:** It is important to be aware of the possibility of a dual stance, with there being differing views expressed and where consensus is not reached. In these circumstances the role of the interviewer is to maintain group cohesion and to reassure the group that diverse views are welcomed.

**...homogeneity and the impact on interaction and content:** Homogeneity in a group helps the group interact and keeps the conversation flowing because of the homogeneity of the group. However, where there is consensus, the depth and breadth of response may be limited. On these occasions the interviewer's role is to challenge, and to ask for expansion of the topic to draw out views.

**...and coming to and making sense of a dead-end (including the risk of hierarchical issues):** Being conscious of the discussion of a topic reaching an endpoint gives the researcher the cue to move the conversation on to the next question.

In some groups there may be dominance of one member over others in the group. This can be as a result of 'power' or hierarchical relationships within the group, and can create bias with members of the group not participating, or distort the reality developing a 'group think' that does not represent the authentic views of all the group members (Schostak and Barbour, 2011). Involving the non-participants and trying to rebalance the responses, limiting the impact of the dominant person in the group, can be challenging but is a necessary role for the researcher.

An additional issue is the challenge of 'interpretation' in the focus group situation where several speakers may have a view and they may not all be in accord. The researcher must be able to synthesise differing views. The grounded theory methodology has a rigour and a process that supports this synthesis (Schostak and Barbour, 2011).

Being aware of all of the points raised above gives the researcher an awareness of the importance of facilitating the free flow of conversation within the group and encouraging participants to share their views through verbal and non-verbal cues. Seeking further detail through additional questions, clarifying or summarising; and ensuring all group members are able to have their say, are strategies that an interviewer can use to continue to deepen the responses of the participants to gather data. Being knowledgeable about simple

conversation analysis helps to understand how knowledge, views, and perceptions can be “negotiated and constructed” (Grønkjær *et al.*, 2011: 26).

#### 6.4.4.3 Questioning

As explained earlier in this chapter, although a literature study was carried out, this was not used as the basis for structuring the interview questions. In line with the grounded theory methodology, to ensure no restrictions on participants engaging in the interviews, or being able to voice their own views, there was a limited number of open-ended questions (given below) with prompts where applicable. The same open-ended questions were used in all interviews to ensure consistency of approach but prompt questions were developed as themes emerged through the intensive interviewing/theoretical sampling process. The aim of the prompt questions was to delve more deeply where an area of particular interest was mentioned (Corbin and Holt, 2011). ‘Leading’ questions were avoided and care was taken when using supplementary questions, as participants were prompted or issues were probed, to avoid leading the interviewee. These supplementary questions ranged from asking for more detail or factual information, repeating a point made to clarify a meaning or summarising, or exploring perceptions or feelings more deeply (Aldridge and Levine, 2001).

The key questions asked were to explore individual boys’ views of their learning, and those of the groups of boys and the groups of girls – both factors that supported learning and factors that hindered learning and how the school or teachers could improve learning.

The open-ended questions were broadly:

##### Outline of questions for pupils

- *Describe where learning is going well and why?*
- *What helps you learn?*
- *What stops you learning? What gets in the way?*
- *Is there anything that I or a teacher or the school could do to improve learning for you?*

I made sure that all interviewees understood the question being asked. This sometimes

meant asking the question in a different way (Oppenheim, 1992: 86). Oppenheimer also stresses that interviews designed to explore thinking need not follow the list of questions in strict order but can be asked in a way that allows the conversation to flow (Oppenheim, 1992: 65) and this was the stance used in this study. The use of semi-structured interviews can result in data being missed because of the exploratory design. In addition, using different wording for questions could alter responses and so make comparison or reliability an issue (Patton, 1980: 206). There is also the issue of different expressions used by respondents and the importance of the interviewer not using academic language that could be difficult for the participants to understand. (Patton, 1980). Patton also suggests that asking simple and easy to answer questions at the beginning of the interview allows the interviewee to feel comfortable with the interview situation. In my case, this was particularly important for the individual interviews, and for those being interviewed in Schools B and C where the participants did not know me. Cooper and Schindler (2001) make the point that the interviewer must be aware of their impact on the interview, the 'border making' (section 6.3.3.2).

Interviewees were given the opportunity to talk without being asked too many questions, rather focusing on a small number of open ended questions to allow participants time to explore their thinking. It was important that the views of the boys were their own, and included their own feelings and beliefs as well as observations and perceptions. This was encouraged. Although as a researcher, I was conscious of the need to be absolutely scrupulous in my objectivity, nevertheless, personal experiences of working with pupils on their learning cannot be discounted. This can be an advantage in being able to elicit responses from pupils that are authentic and shared openly but with a cautionary note, as rehearsed earlier of maintaining objectivity.

The grounded theory approach described by Charmaz (2014) emphasises flexibility in interviewing and an iterative approach, following up emerging ideas and concepts as they emerge from discussion in subsequent interviews. Moving between data capture and an analytical stance is a common strategy in grounded theory analysis (Charmaz 2014: 94). This approach to further interviewing based on initial findings is believed to give robustness to theoretical categories emerging. Charmaz (2014: 88) stresses the importance of further interviewing to ensure "theoretical plausibility, direction, centrality and adequacy" of data. The first four interviews were analysed in depth to identify some of the emerging concepts. Charmaz (2014) describes this technique as 'intensive interviewing' to allow provisional concepts to be identified and explored in further interviews in an

interactive way, without leading the participant. The approach of coding responses of interviews by scanning on an ongoing basis also shaped the themes explored in the interviews with the groups of boys and the groups of girls.

The teachers and the pupil support assistant and the parents were interviewed individually and the intensive interviewing process was used in these interviews, in the same way as it had been used with the boys' individual interviews: beginning with open-ended questions with the first interviews and then exploring emerging concepts in subsequent interviews where necessary. With only four parents, there was not the same scope for this type of theoretical sampling.

The open-ended questions for the teachers and parents are given below:

Outline of questions for teachers

- *Explain what you believe helps pupils to learn. Give some examples.*
- *In your view, do you believe there any differences in the way boys and girls approach learning?*
- *What can be a barrier to learning?*
- *Is there anything that the school could do to improve learning?*

Outline of questions for parents

- *Explain what you believe helps <name of child > to learn. Give some examples.*
- *In your view, do you believe there any differences in the way boys and girls approach learning?*
- *What can be a barrier to <>'s learning?*
- *Is there anything that the school could do to improve learning for <>?*



The questions used in Schools B and C were the same as those used for the groups of pupils and the teachers as had been used in School A. Again theoretical sampling was used where a concept emerged to be explored in subsequent interviews. There was greater emphasis in the interviews, where pupils did not have a relationship with me, to make them feel at ease and to try to build rapport. I consciously began the interviews with a general discussion, finding out about them as people and, on occasion, allowing them to digress during the interview. Every effort was made to include all participants and to develop a discussion, a conversation rather than strictly going through each question in turn.

#### **6.4.5 Transcription of interviews**

There are a variety of ways to transcribe, for example, simply summarising what has been said, noting the main points, taking brief notes or doing more detailed transcription (Cohen *et al.*, 2011; Charmaz, 2014). Kvale (1996: 166) points out that data changes as soon as it is transcribed because the data captured is “oral and interpersonal” and this is changed into “written language”. Kvale also suggests that any transcription has already been changed into interpreted data. To limit any changes to the data I transcribed the audio-recorded interviews as accurately, and with as much nuance as possible. The detailed transcription allowed forensic interrogation of the data later. I also took hand written notes to back up the audio recording. No attempt was made to note all instances of paralinguistics, and words that added nothing to the meaning of what was being said. There were occasions where what was said was difficult to interpret from the audio recording. When this proved too challenging a note was added to the transcript. I used ‘memoing’, which is an essential part of grounded theory (Corbin and Holt, 2011) making notes for each interview, recording the engagement and responsiveness of those being interviewed including any points that could have limited or restricted responses, or anything else worthy of note. Memoing is also an essential aspect of logging ideas and thoughts or diagrams of the conceptualisation and categorisation process as the analysis develops. In grounded theory this analysis begins with the first interview.

I aimed to include, where relevant, disagreements, and agreements and other social dynamics that could impact on the findings but I did not analyse the conversation in depth. I did not record conventions such as pauses, body language, eye contact and other non-verbal signals (Puchta and Potter, 2004; Barbour, 2007). I was also aware that audio recording and transcription rather than video recording did not allow for this type of detailed analysis (Halkier, 2010).

There was ongoing analysis of the data using the grounded theory approach (Strauss and Corbin, 1990; Corbin and Strauss, 2008) supplemented by techniques discussed by Charmaz (2014). This approach, using qualitative data collection through intensive interviewing and a grounded theory approach is “open-ended yet direct, shaped yet emergent, and paced yet unrestricted” (Charmaz, 2014: 85). In summary, the questions asked were specific but open-ended; the responses were reflections of the lived experiences of the subjects and these were explored as they emerged in subsequent interviews within each grouping of subjects; and there was focus during the interviews whilst giving participants time and space to share their experiences and attitudes.

### **6.5 Data analysis using a grounded theory approach**

The analytical method attributable to Charmaz was adopted and this is discussed in the next chapter.

## **Chapter 7: Discussion of the methodology for data analysis – the grounded theory approach**

### **7.1 Chapter overview**

As explained in Chapter 6 a grounded theory approach was adopted to gather the data from interviews conducted through the use of open-ended questions that allowed the participants an authentic voice. This chapter discusses the grounded theory approach to data analysis: coding, identification of patterns, grounded conceptualisation and categorisation, justifying this method of analysis for this study of drawing from the grounded data emerging from the interviews. A process diagram is included to illustrate the method of analysis. This process synthesised the ‘voices’ of the participants to build knowledge, understanding, interpretation and a tentative framework to try to explain the phenomenon under investigation. The importance of the researcher in the analysis process has also been explored.

### **7.2 Principles of analysis**

As mentioned previously, there are several variants of the grounded theory methodology first proposed by Glaser and Strauss (1967), but the key principles remain the same. In broad terms the grounded theory method is one where a theory is *emergent*, not a method that is using a predefined or formulated hypothesis or theory to be tested. The aim is that a theory *emerges* and is *built* from the data gathered rather than data verifying a predetermined hypothesis or theory. As Flick (2009: 90) asserts “the grounded theory approach gives priority to the data and the field under study over theoretical assumptions”. The generation of any theory is as a result of, and in tandem with, *systematic* data collection and analysis (Charmaz, 2005), and patterns, concepts and any theory are within the data itself. Grounded theory is “inductive and deductive, it is iterative and close to the data that give rise to it” (Cohen *et al.*, 2011: 598). What is recognised is that the world in which people live is complex (Glaser, 2002) and messy, and there are interconnections between people (Cohen *et al.*, 2011). This must all be considered when embarking on the analysis: trying to make sense of this complexity and staying true to the messiness: “inconsistencies, contradictions, discontinuities and relatedness in actions” (Cohen *et al.*, 2011: 598). Flick (2009: 91) asserts that the aim with grounded theory is not to simplify the complexity through breaking it into simple variables but to “increase complexity by accepting context”. There is also “circularity” (Flick, 2009: 92) built into the process

where the researcher is continually reflecting on the process, and is moving between collecting and interpreting the data. The process is not linear. The aim therefore in this study was not to confirm or refute current theories or hypotheses about why boys appear to underachieve but to try to establish new thinking tied directly to the data collected. This might have meant that what was revealed was only applicable to School A, but the conclusions would be indisputably linked directly to the data gathered.

### **7.2.1 Definitions of terms**

Different terms are used by different researchers, and so for clarity some basic definitions of the terms used here are listed.

#### ***Context***

In grounded theory the context is important. “Action doesn’t just occur, it occurs in response to something” (Corbin and Holt, (2011: 115). The conditions or the context that people respond to can make them respond differently. The context is an integral part of grounded theory methodology. There are two contexts in this thesis. Firstly, the ‘school’ context, with the data being gathered from three different schools with their different cultures. The data gathered of how people respond in these settings is unique to the setting itself and that context. Secondly, the ambition was to explore if an emergent grounded theory could be applied to a wider ‘educational’ context by exploring how the theory transferred between the three schools. The suggestions for explanation and action relating to the phenomenon under study, beyond the three schools and to the wider educational context, would be speculative because of context being fundamental to grounded theory development.

#### ***Data***

The use of the word data in the context of qualitative research is contested (Briggs *et al.*, 2012). In the qualitative world, where the type of information reported could be description, interpretation, concepts, values, and beliefs, the word ‘data’ may not seem appropriate as it has a connotation of being linked to facts or metrics of the world of quantitative research. Briggs *et al.* (2012: 386) suggest that some researchers see the qualitative world as not based on objective facts but on a “reality that is socially constructed and that truths are negotiated by actors in specific contexts”. This may well be the case as the material being gathered relates to someone trying to give voice to their own lived experiences within a specific context, which may appear real to them but a

construction to others. Data is the term used in this research study to mean all of the qualitative information, verbal and non-verbal: the participants' verbal responses, gestures and interactions in the interviews. It also covers memos to capture pertinent points related to the participants' responses, gestures, and interactions of participants. The data also includes all of the interpretations: the coding and concepts that are inferred from the responses to the questions, which are exemplified in the worked example in Appendix 10 and in the conceptual maps for the different sets of interviews conducted (Chapter 8). The 'memos' or notes taken during the analytical process are also classed as data as this has aided the interpretation of the data gathered through interview. Data is also the quantitative data of examination statistics, which informed the analysis discussed in Chapter 2.

### ***Description***

Much of what is heard through the gathering of data is not conceptual or abstract but *descriptive*. Participants answering questions give accounts of what has happened in their lives, describing the world from their perspective: grounded in their world. A researcher, in attempting to interpret what is being said, can rewrite what the participant has said as a *description*. The *description* can be a way of the researcher making sense of what the participant has said. Both the participant and the researcher are influenced by the context in which they live, or as described by Bourdieu (1990): 'habitus', 'capital' and 'field' (Chapter 3: 58). It is important that the researcher is as accurate as possible with description. However, the researcher must have the skills of interpretation and inference because of the nature of what is being said, for example perspectives on gender, where there is some ambiguity, or where the meaning is not clear. This use of *description* is sometimes necessary for clarity, and descriptions can be useful when attempting to elaborate on the richness and depth of meaning of an abstract thought or idea arising from the analysis. However, it is important that the researcher is aware that to give a *description* is not conceptualisation (Glaser, 2002).

Two examples are given below where *description* was used to interpret what was said. The codes generated are still descriptive but do have elements of conceptualisation. The concepts assigned to the codes are also given below.

### ***Example 1***

Extract from the transcript:

“...more a group worker and do more work in that class (Spanish) because in groups - helps a lot - because if do not understand something can bounce off

*someone else.” (B17)*<sup>31</sup>

The code generated for this statement: ‘*Groupwork allows for peer support when not understanding something.*’ The addition of ‘*peer support when not understanding something*’ may only be attributable to this one boy and may not be transferable and so is ‘descriptive’ whereas ‘groupwork’ is more abstract and as such became a concept. Including the additional material in the code adds depth and understanding and is useful when referring back to the codes during conceptualisation and categorisation.

The conceptualisation of this code was ‘qualifying engaging learning methodology’. The concept of ‘groupwork’, and what was inferred from the participant’s statement (the *description*) gave a sense that the participant understood what worked for him in terms of engaging him in learning hence ‘groupwork’ was linked to the more abstract concept of ‘qualifying engaging learning methodology’.

#### *Example 2*

Extract from the transcript:

*“If there is a teacher who is rambling on, the guys’ minds are somewhere else, whereas the girls are more focussed.” (B4)*

The code generated for this statement: ‘*Teachers talking to the class – boys’ minds drift: girls focused*’. This is a *description* and is specific to this one statement but again adds some colour to aid the understanding of this boy’s perceptions. It does indicate a gender duality stance and so the conceptualisation of this code is ‘conceptualising gender identity/learner identity.’

#### **Code**

This is used in this research to mean the reinterpretation by the researcher of the raw data into a more concise phrase. This could be a description or could take the form of a concept. Concepts are at the heart of grounded theory, but not all interpretations of the original data have been conceptualised but have been left as description. However, all data was coded to ensure that nothing was lost. Appendix 10 illustrates the codes developed to interpret and to give meaning to what the participant said. In some cases, this is straightforward but in other cases there is more reliance on the researcher’s ability of interpretation. Codes are

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<sup>31</sup> Note: the code in brackets refers to the participant(s). The codes for all the participants in all three schools are shown in table 8.1

further qualified in the literature into *open*, *axial* and *selective* codes (Cohen *et al.*, 2011). In simple terms *open* coding is when meaning is given to the data, and phrases are developed that give further understanding and abstraction to the data where possible, synthesising until all the coding is complete. *Axial* coding is a process of finding links between the codes and categories: looking for connections (Moghaddam, 2006; Corbin and Strauss, 2015: 156). The example in the last section of ‘groupwork’ being linked to the concept of ‘qualifying engaging learning methodology’ is *axial* coding. *Selective* coding is where a core category is identified with which other categories and codes fit and theory generation is then possible: it provides the “story line” (Creswell, 2007: 67).

### ***Concepts***

This is the term applied by researchers to new ideas or notions that have arisen from scanning the data and are from an abstract perspective. It is the interpretation of the data from the stance of the researcher not the participant (Corbin and Holt, 2011). Different authors have different definitions of a ‘concept’. Corbin and Holt (2011) define this as “an abstract interpretation of a piece of data” (p. 114) with Glaser (2002) defining concept as “the naming of an emergent social pattern grounded in research data” (p. 24). The two defining features for concepts, according to Glaser, are that they are “abstract of time, place and people, and that concepts have enduring grab” (p 24)

...because grounded theory operates at a conceptual level, relating concept to concept, it can tap the latent structure which is always there and drives and organises behaviour and its social psychological aspects, all of which are abstract of objective fact (Glaser, 2002: 26).

Concepts allow patterns to be seen in the data that can lead to data being grouped under a conceptual idea: ideas that have the same root. This begins to synthesise the data under a number of headings. Concepts appear in this study both in the coding, for example ‘seeing parents as influential’ (BB5) and also the higher level concepts that synthesise the codes, for example ‘competitiveness’.

### ***Category***

A category is the name given to a group of concepts. (Categories are sometimes referred to in the literature as themes but this has been avoided here). Where concepts can be grouped under a more generic heading a category is born. The category is more abstracted and at a higher level (Corbin and Holt, 2011). Categorisation demands interpretative skills of the researcher. In this study, the three categories that appeared to group the concepts were ‘**self-awareness of effective learning**’, ‘**self-awareness of barriers to learning**’ and

‘perception of gender identity’.

### ***Grounded theory***

*Theory* is the highest level in grounded theory methodology. The aim of the theory is to give an interpretation, from the perspective of the researcher, of why people act within a specific context or set of circumstances that are relevant to their lives. The theory should take account of all the data and ‘fit’ with the data (Glaser, 2002). The test for the theory is if it can be transferable to more than the unique situation being examined, but it is important to emphasise that this should still be within the context of the problem or phenomenon being investigated (Cohen *et al.*, 2011). Because of the nature of the theory development, it is not expected that a theory would be applicable to any context otherwise it would no longer be a *grounded* theory. For example, in this study as explained later in this chapter, a possible tentative emergent grounded theory suggested as a result of the interviews with the boys in School A was that **boys’ self-realisation of successful learning is being limited by an essentialist construction of gender, with gender stereotypical characteristics. Gender is constructed as being bipolar and with these two categories being mutually exclusive.** The theory attempts to give an interpretation of all the data gathered and is a synthesis of the codes and categories assigned.

### ***Properties and dimensions***

During the process of assigning codes, concepts and then grouping into categories, it becomes apparent that some of the original codes and concepts give the detail and richness to a particular category. These codes/concepts then take on the form of a *property* of the category: a way of giving the category more substance or quality. *Dimensions* are the researcher’s interpretation of the size of the contribution of a particular concept or category from the data gathered. How important did this appear from the perspective of the participant? “Properties and dimensions are the conceptual descriptors or qualifiers of each category ... and define and differentiate each category” (Corbin and Holt, 2011: 115).

In this study, conceptualisation led to concepts such as ‘influence of the teacher’, ‘motivation’ and ‘peer pressure’. As the process continued with the iterative method applied of continually revisiting the codes, concepts were grouped and conflated, for example, ‘motivation’, ‘confidence’, ‘competitiveness’, although concepts, became *properties* of a new concept ‘characteristics of the learner’, which in turn was a *property* of the category ‘**perceptions of factors influencing boys’ learning**’. To try to give some indication of attention given by the participants to different aspects that could be



influencing learning *dimensions* were given for each of the concepts. In this study, this is shown by the size of the boxes in the conceptual maps developed to give a pictorial representation of the concepts.

### ***Theoretical sampling***

This is one of the underpinning tenets of grounded theory. The data is collected on an ongoing, iterative basis. The data collected and the concurrent analysis of the data then influences future data collection: from whom and what is being sought (Glaser and Strauss, 1967). As mentioned in Chapter 6, this term *theoretical sampling* is also similar to the term *intensive interviewing* (Charmaz, 2014). For example, it became apparent from the first interviews that the teacher and relevance of learning were being raised by the participants as impacting on their learning. This was then followed up in further interviews as part of the *intensive interviewing* process, *theoretically sampling* for these concepts by asking supplementary questions, with questions being as open as possible. *Theoretical sampling*, by seeking views about particular concepts of more participants than planned, was not possible because of the nature of the access to the schools. However, enough interviews were set up to achieve saturation in School A.

### **7.2.2 Process of analysis**

The process of analysis begins with scanning the qualitative data gathered. The aim of the scanning process is to seek explanations and interpretations (Glaser and Strauss, 1967). This scanning is accompanied by coding, with the data coded for meaning, seeking concepts and then categorisation (Charmaz, 2014) all in an iterative or ‘circular’ process (Flick, 2009), with the aim of applying *axial* coding to develop linkages between the categories and/or a framework that could develop into a tentative theory.

The systematic analysis of data is fundamental to this method. To be able to draw from all the data gathered, and leave nothing out, the analysis relies on careful transcription. As explained a full, thorough and accurate transcription was carried out for all interviews to include all the detail and nuance of what was being said. This systematic process gave rich data from which to draw. The transcription process was deliberately not given to a third party but completed personally to be able to hear again what was being said and any nuances that were worth noting. In grounded theory, as soon as the first interview is completed the process of analysis begins.

Some consideration was given to using NVivo, a software package, that analyses data for

codes, concepts, and tags whatever the researcher has decided to input by way of criteria. However, it was decided, despite the large amount of data to handle, to do the analysis by inspection. It was felt that the continual scrutiny and personal interpretation of the data, allowed meaning to be developed to deepen thinking about the phenomenon under investigation, as well as being able to adopt a conceptual stance that was not limited by predetermined criteria. I was not convinced that this same level of engagement with the data could be achieved through the use of a software package. I also felt that the nuancing of what was being said by the interviewees could only be considered by examining and re-examining the data personally.

The first stage in the analytical process is to carry out coding – to assign codes to the raw data gathered (Glaser and Strauss, 1967; Charmaz, 2014). When coding, the qualitative data can be considered in large paragraphs or sections, or in a more nuanced way by individual words or phrases, or by each line (Corbin and Holt, 2011; Cohen *et al.*, 2011). The method preferred in this research was ‘line-by-line’ coding as advocated by Charmaz (2014) and described by Corbin and Holt (2011: 114) as ‘micro-analysis’. This micro-analysis demands that each line of a transcript is scrutinised carefully, and then meaning given to each line of data. This is a time consuming process but ensures that no idea or concept is lost in the analysis. Coding aims to give a way of making sense of the data collected: looking more deeply, questioning, and being able to sort the data to lead to synthesis of ideas and actions. Line-by-line coding should lead to each piece of data being summarised. The code should define what is happening and so find meaning from the stance of the participant (Charmaz, 2014). In this study I have described this process as ‘initial’ coding (Charmaz, 2014) as it is a first attempt to understand what is being said. It is important to be conscious of being analytical when considering the coding rather than descriptive, although in the first instance description was sometimes the result because of the descriptive nature of what was being said. The aim of coding is to move beyond description to conceptualisation. Every effort was made to be as objective as possible although, being the tool used to interpret the data, interpretation can be influenced by one’s experiences and could be reflected in the coding, and so it was important to “remain open” (Charmaz, 2014: 120). I attempted to be scrupulous in the coding exercise to ensure that the coding reflected the views of the participants, “staying close to the data” (Charmaz, 2014: 120). These two points emphasise the need to be objective as an ethical researcher. Keeping codes “simple and precise” and constructing “short codes” (Charmaz, 2014: 120) was the aim but was not always possible without losing some of the nuance and meaning. As much detail as possible was retained to allow better synthesis of ideas later.

As explained in Chapter 6, the approach advocated by Charmaz (2014), and practiced in this study, aims to begin the process of conceptualisation (looking for abstract ideas or concepts emerging from the data) from the first interview. Scanning the interviews from the first interview for emerging views, patterns and concepts, allows any points to be further explored in later interviews as part of an iterative process, continually moving between the data collected and the analysis: *intensive interviewing*.

There are some pitfalls that can be experienced with coding that should be highlighted. Although Charmaz (2014: 159) emphasises the need to keep codes short, there can be danger of making coding too general and so lose the original meaning. Two further points to be aware of are: focusing on identifying ‘topics’ rather than seeing processes or actions, and not considering how different people ‘construct’ these actions and processes. A key point made by Charmaz was the need, when coding, to “preserve actions”. Charmaz suggests that having the coding in the form of gerunds gives a stance of action or analysis. Some examples of codes drawn from this research serve to illustrate this point. For example: *‘appearing to feel very strongly about relevance of learning in school linked to future careers’* (B14); *‘Preferring practical work – hands on: Believing this improves learning and engagement’* (B2, B18); *‘Perceiving that teachers know that girls are going to perform better than boys’* (B9). This way of coding was not always easy because of what had been said nor was it considered necessary, particularly when concepts began to emerge.

A point emphasised by Glaser (2002) and also made by Charmaz (2014) is the danger of using codes to give a summary rather than an analysis. However, summarising may sometimes be the best option, as a code might be adding some depth and description to an experience being shared that would illustrate a concept later on in the analytical process. This also can help to retain detail in the coding process. To illustrate this last point of the challenge of keeping codes short and merely providing a summary, one of the statements made by participant B17 was *“Important to be able to work it out for yourself because only one in an exam.”* This was coded as *‘Stating need to be able to work independently because this is what is needed for an exam’*. This could have been coded as *‘Stating need to be able to work independently’* but the additional detail was added to give the context, which may or may not have been relevant when comparing data from other interviews, but avoided the need to keep returning to the original transcript, thus reducing the amount of data that had to be constantly scrutinised.

### 7.2.3 Induction, deduction and abduction

There are three concepts of inference associated with grounded theory: induction, deduction and abduction. ‘Induced’ is often the word seen in the literature to explain how concepts and ideas can be gleaned from the data gathered as part of the process of grounded theory, drawing from the data alone without reference to other known theories. Induction moves from “specific cases to a general law” (Ezzy, 2002: 14), whereas abduction is inference that relies on new ideas or imagination to explain events or observations. Deduction relies on there being a rule present and this is then verified or refuted with the data or evidence gathered. Induction starts with the evidence or data that is then scrutinised to arrive at a rule through inference. Abduction is less certain and uses the data or evidence to develop the best fit in a specific situation often with some new surprising, novel or unexpected evidence to hand. Induction is used to code and group into categories whereas abduction gives explanations and hence the theory. Timmermans and Tavory (2012) raise the dilemma of induction, of not being influenced by pre-existing theories, but stress that there is a need to know about theories to have an understanding of the phenomenon under investigation. “Abduction seeks a theory. Induction seeks for facts” (Peirce, 1958: 217-18, cited in Timmermans and Tavory, 2012: 171). Timmermans and Tavory go further in claiming that this is the reason for using abduction for inference as this depends on how the researcher sees the world, which depends on the experience of the researcher and his/her knowledge of the field. “Unanticipated and surprising observations are strategic in the sense that they depend on a theoretically sensitised observer who recognises their potential relevance” (Timmermans and Tavory, 2012: 173). Abduction uses pre-existing theories to *inform* the process of thinking but is still a method that *generates* theories (Ezzy, 2002). “Abduction should be understood as a continuous process of conjecturing about the world that is shaped by the solutions a researcher has ‘ready-to-hand’” (Heidegger [1927] 1996)” (Timmermans and Tavory, 2012: 172). Peirce, the founder of abduction, stressed the need for deep insight to be able to develop new knowledge (Reichert, 2010). Deduction and induction are then used to test a theory.

Grounded theory has the potential to produce theories that are new, but Timmermans and Tavory (2012) assert that creating new theories will be limited if considering only induction as a process, that is letting ideas emerge from the data. They argue, based on the work of Peirce, that abduction should be the *modus operandi*. Developing understanding of the data and formulating theories demands interplay between the data and abstraction that has the potential to create theoretical innovation. Researchers claim that this potential has

not been fulfilled because of the inductive stance of allowing theory to emerge from the data. Timmermans and Tavory (2012: 168) cite authors using abduction where they are creating hypotheses using any “surprising evidence”. They argue that rather than abduction following on from induction and taking second place it should forefront grounded theory analysis. This perspective privileges the creative inference, thinking about findings that might appear novel or different, giving a new interpretation of what is being studied. These inferences can then be considered again with new data, moving between the data and the analysis, which is one of the principles of grounded theory. One of the important features of abduction is to be able to recognise new and innovative hypotheses by being well informed about current theories. This is in accord with the researcher having the knowledge to be able to analyse the data not from a position of not knowing but one of being well informed about the field under study.

“Theories are ways of either to ask new questions or to make new observations possible” and more specifically the use of abduction generates “novel theoretical insights that reframe empirical findings in contrast to existing theories” (Timmermans and Tavory, 2012: 174). It is often the anomalies in the data where abduction is usefully applied as new hypotheses need to be considered to explain these anomalies. This method still demands rigour and careful data analysis but also needs a researcher with theoretical knowledge in the field being studied. Abduction as well as induction are therefore concepts that have been used when considering the data and evidence when trying to give explanations and develop hypotheses.

#### **7.2.4 Impact of researcher on analysis**

The underpinning process of any qualitative research method is one of interpretation. As the researcher interpreting the data I was acutely conscious of my value system, personal interest and past experience (Creswell, 2003) but within an ethical and objective framework demanded of ethics. This is particularly important at the stage of analysis and presentation of a theory. Although the researcher is using this ‘grounded in the data’ approach to scanning and is not basing assumptions on preconceived ideas or *a priori* theories (Glaser and Strauss, 1967; Charmaz, 2014) he/she must possess “theoretical sensitivity,” consisting of the “ability to have theoretical insight into an area of research, combined with an ability to make something of insights” (Glaser and Strauss, 1967: 46). Charmaz (2014: 117) emphasises the need to code with an open mind not an “empty head”: being open minded, but learning from the coding in the context of one’s own

experience.

In my former roles as teacher and Head Teacher of many years' experience, I have gained expertise and insight into learning both from an operational and strategic perspective. This has included working directly with pupils, carrying out interviews and conversations with pupils about their learning, as well as developing policy and practice at classroom, school and national level. These roles have demanded wide reading of the literature, with the emphasis on not seeking specific factors that could explain the phenomenon under study, to avoid developing pre-conceived ideas. This knowledge and insight was important for me to understand and make inferences from what was being said by the participants in the interview. The insider status of being Head Teacher in the school also helped to put the pupils at ease based on relationships, their past history of an open, and supportive school ethos, notwithstanding the border making (Gubrium and Koro-Ljungberg, 2005). Although I was in this position of Head Teacher when interviewing the pupils in School A I was very aware of the need to be cautious of my position and to step outside of this persona: to be objective and analytical about the interviewing and subsequent analysis and theory construction. I was particularly conscious of trying to understand and give meaning from the participant's perspective, hence not having the transcriptions completed by a third party or using NVivo software, rather to immerse myself in what was being said. The assigning of codes and concepts can be personal despite the desire to be objective, but it is important to avoid preconceptions, which is a danger when data is viewed from our personal experiences. We see things through our own lens, and experience is always personal to us (Davison, 2004), which can influence thinking and hence coding. It was therefore essential to continually try to reflect the participant's view rather than my view. Being tolerant and open to the data and conscious of theory generation rather than verification, and being able to cope with ambiguity are essential characteristics of the researcher (Cohen *et al.*, 2011). However, Glaser (2002) emphasises that it is the researcher who has the final say about the intersection of the concepts generated and the descriptors, properties or dimensions of the concepts.

It is also important that the researcher is aware of deciding when enough interviews have been completed, which is normally when the scanning and analytical process reveals no further concepts/categories and ideas that can add anything new to the analysis carried out. This is the point of 'saturation' and is discussed in the next section.

### 7.2.5 Saturation

Deciding on the number of interviews was determined by the qualitative nature of the interviews and ‘saturation’, being aware that qualitative data collection generally demands a smaller sample size (Ritchie *et al.*, 2003: 83). ‘Saturation’ is when continuing to carry out further data gathering is revealing no new information (Glaser and Strauss, 1967). Some researchers, for example Dey (1999), advocate that saturation should not be considered because the process of gathering data could be halted before enough data has been collected. By contrast others, for example Strauss and Corbin (1998: 136), recommend that saturation is a “matter of degree”, and the longer the process of gathering and analysing data goes on new ideas could surface. There comes a point where continuing to gather data is not adding anything of substance to the analysis and can become “counterproductive” and this is the point that saturation is reached. However, they do suggest that with continual re-examination of the data and the analysis, potentially new ideas could emerge.

This study has considered saturation, although when to stop gathering data is contested. The rationale for using a qualitative method is to seek meaning. Saturation could be when this meaning is realised in enough detail to allow analysis to be carried out. Meaning could be realised by one participant. Mason (2010) has carried out a study of the number of interviews conducted in several qualitative studies and came to the conclusion that there is no definite number or rule to follow. Too small a sample could result in new thoughts and views being missed, whereas too large a sample could lead to hearing the same point repeated and could be costly in terms of time with no added benefit. It is worth noting that in this type of qualitative analysis, a single view expressed or point made by one respondent can be useful and would be included for consideration in the analysis process (Mason, 2010) without the need to continue to look for this point being repeated. Having just enough interviews to cover all the different views and perceptions is the ideal hence there is a need to be mindful of the concept of ‘saturation’.

The guiding principle used for the number of individual interviews carried out was to achieve the key aim of the study – to explore factors that facilitate or hinder progress in learning amongst boys who are deemed academically able in School A, by ensuring that this aim was adequately addressed through the number of interviews carried out (Charmaz, 2006). A small-scale ambition may well reach saturation with a small number of interviews whereas where the scope of the study is larger, more interviews may need to be

carried out. Ritchie *et al.* (2003) give a useful set of criteria, which helps when considering the number of interviews. Those criteria considered for this study are how homogeneous the population is and the criteria for selecting the subjects: in this case this relatively homogeneous group is drawn from potentially academically able boys from three year groups. Ritchie *et al.* also advocate a greater number when the group is a special interest group as is the case here, and when the interviews are carried out individually rather than in groups. Jette *et al.* (2003) also claim that where the researcher has expertise in the area the sample is likely to be smaller because deeper inference can be drawn from the data more readily than someone who is less experienced. Morse (2008) goes further and suggests that the ability of the researcher as interviewer can impact on the quality of the data collected and this can influence when saturation is reached (Guest *et al.*, 2006). Morse (2008) also suggests that the quality of the data is the influencing factor in determining the point when data gathering can stop rather than the number of events.

In this study eighteen interviews with individual boys were carried out. This gave coverage of the three year groups, S4, S5 and S6, and those who were achieving as expected and others who were not. The aim was to have more from S6 because of their longer experience of learning in the school and of external examinations, and their having had more stages when they personally reflected on their learning and progress. On examining the interview transcriptions there appeared to be enough data to draw out concepts and categories for consideration. There may have been too many but with the volume of data there did not appear to be too few, especially when this was supplemented by the views of groups of boys in the same year groups. These boys' focus groups were used as a way of 'testing' the conceptual mapping as well as potentially identifying new concepts. An additional consideration was the timescale, and more interviews would have been problematic because of the time constraints. This can be factor in this type of research, but I was in the fortunate position of having access at the beginning of this study to pupils for interview who were willing to take part because I was located in School A. Accessing any additional pupils subsequently would have been more difficult because I was no longer Head Teacher. Eighteen would be almost as many as the common sample size found by Mason (2010) in his research on saturation examining PhD studies using qualitative data, and adheres to Bertaux's guideline of being greater than fifteen. This is further supported by Guest *et al.* (2006) in their research into how many interviews are sufficient. They concluded that saturation was reached within the first twelve interviews.



### 7.2.6 Conceptualisation, categorisation and context

The process in grounded theory is of coding, conceptualisation and then categorisation in that order but with continual revisiting of the data and the analysis to reflect and refine the outcomes. When examining the initial codes assigned to each line of data some of these could be considered as concepts, “abstract interpretations of a piece of data” (Corbin and Holt, 2011: 114) but could also be descriptions and so not concepts, which is the reason for not using the term concept at the early stage of the analysis. However, Charmaz (2014: 118) asserts “compelling codes capture the phenomenon and grab the reader”.

The terms ‘concepts’, ‘categories’ and ‘context’ have been defined earlier in this chapter (section 7.2.1). Conceptualisation and categorisation are processes that are fundamental to grounded theory with the concepts and broader provisional categories selected to fit with the data, with the key feature according to Glaser (2002) being ‘conceptualisation’. As explained in the definitions a concept is an idea that moves beyond description to abstraction. Glaser argues that conceptualisation gives enduring meaning to data, unlike methods that rely on description. Conceptualisation also allows all data to be utilised in the quest to seek meaning. Glaser does not suggest that description does not have value but rather description is fixed in time, place and context and so is limited by these dimensions. Glaser suggests that descriptions or qualifying information are not needed to develop concepts or theory but that some researchers use these as if they are necessary. However, Glaser emphasises that they are only needed if they make a “conceptual difference” (p. 26). Using descriptions rather than conceptualisation can lead to these describing a context rather than considering process.

Glaser argues that concepts should be timeless whereas descriptions can be set in a specific timeframe. He also emphasises that grounded theory is focused on behaviour rather than people. In the context of this study, using this conceptual approach advocated by Glaser, the focus is on the social process, for example the “cultivating behaviour” (p 27) or relevant learning. The ‘grab’ of conceptualisation is the power to explain behaviour and to make connections between different incidences and concepts (*axial* coding).

Glaser’s notion of a concept being abstract of time, place and people also raises the question of context. Glaser argues that researchers who have a tendency to assign contextualisation to their grounded theory limit the features that he stresses – abstraction and generalisation. Glaser (2002) gives the example of Strauss and Corbin (1998) using

grounded theory and their assertion that the method does demand location in a context. Strauss and Corbin make this case to avoid key factors being missed that are relevant to a context. Glaser makes the case for abstraction to allow there to be “generalizability” (p. 25). In this study, I was aware that I was drawing data from three different schools. Each school was being examined as a case study. The case study in School A was the most extensive because of the amount of data collected from a wider range of people and the method of selection of the participants was under my control. The two other schools were used as cases studies, although these case studies were more limited than the case study in School A. From a case study perspective, the outcomes being applicable to only the test site context (in this case the particular school) is contested (Flyvbjerg, 2006). As such there is a contextual element that could influence the outcomes of the investigation, which would accord with Strauss and Corbin’s view. However, the principle advocated by Glaser is that with adequate sampling and with conceptualisation, the grounded theory emerging can be *applied* to other settings if there is ‘fit’ (p. 26). The concepts themselves may transcend the particular school environment or pupil population (or context) and be transferable to other schools. I use the term ‘transferability’ rather than the term ‘generalisability’ used by Glaser. I have explored ‘transferability’ through the interviews carried out in the two schools, B and C. In this study, I am using the definition accorded to Glaser (2002: 25) to test for conceptualisation that concept should transcend “time, place and people”.

Glaser defines the concept as the “naming of an emergent social pattern grounded in research data” (p 24). “The concept is a pattern that is carefully discovered by constant comparing of theoretically sampled data” until there is “conceptual saturation” (p 24). One of the key principles is to constantly revisit the data in an iterative way to compare and conceptualise.

Glaser describes grounded theory as a “latent structure analysis” from which patterns emerge (p. 24). The name of the ‘pattern’ is the “category or property of the category”. Conceptualisation is important if there are to be hypotheses and hence theory. Concepts can be related to other concepts because they are abstracted. But descriptions cannot be related to one another because of their being fixed by context. I did not eschew descriptions but was cognisant that they were descriptions. I kept these to support any discussion by way of illustrations.

### 7.2.7 Perspectives on ‘emergent’ theory

The definition of *theory* in general terms is a framework that explains how concepts are linked together, with the rationale of giving an explanation of a particular phenomenon and moreover having the capacity to be predictive. “It is a source of new hypotheses and hitherto unasked questions...” (Cohen *et al.*, 2011: 9). A theory is an explanation that is based on or has been verified by data/facts, usually beginning with a hypothesis, which is a *suggested* explanation. The aim of this study, explained earlier when discussing the principles of grounded theory, is not to confirm or refute current theories or hypotheses about why boys appear to underachieve but to try to establish new thinking that is tied directly to the data collected, which in turn will allow new questions to be considered. Grounded theory is developed from empirical data that is scrutinised, coded and ordered into concepts and categories that are supported and can be illustrated using the data. Grounding concepts in the data collected, and any emergent theory, ensures “fit, relevance and workability” (Glaser, 2002: 31).

By "fit" we mean that the categories must be readily (not forcibly) applicable to and indicated by the data under study; by "work" we mean that they must be meaningfully relevant to and be able to explain the behavior under study (Glaser and Strauss, 1967: 3).

In contrast theories based on assumptions can be problematic because they are not necessarily grounded in empirical data. Being grounded in the data of a study may mean that what is revealed is only applicable in one school but will be indisputably linked directly to the data gathered. The further schools used as test sites were to consider transferability of the concepts and the emergent theory. The fundamental principle of grounded theory is that “theory generated from observation to explain the observed” thus both fits and is directly relevant to the data (p. 32). This is in contrast to a stance where concepts arising from conjecture may appear to be relevant, but unless they are grounded in the data can be questionable.

Glaser and Strauss (1967: 5) also suggest that the “adequacy” of a theory in the field of sociology is dependent on the process, and they go further in suggesting that key criteria to assess the theory such as “consistency”, “scope” and “integration”, as well as how well the theory “fits” with the data and “works” as a theory, also depends on the process. This process is dependent on the skills of the researcher in induction, deduction and abduction (Glaser, 2002; Timmermans and Tavory, 2012).

How the theory is ‘created’ is a contested area. Is this the province of the researcher alone or do the participants have a part in the theory creation? Some researchers, for example Glaser, are adamant that the participants are not involved in theory creation as he asserts that “the participants are the data, NOT the theorists” (Glaser, 2002: 29). Glaser justifies this in suggesting that the participants rarely have an understanding of conceptualisation unlike the researcher. Glaser also believes that seeking confirmation or views from participants to ‘check’ or ‘test’ any theory is not advised. It may be that the participants do not understand the theory, but more importantly the interpretation and conceptualisation of their perceptions through this grounded theory approach may not be how they conceptualise their lived experiences, if indeed they do conceptualise their behaviours. Glaser goes on to assert that grounded theory is not the ‘voice’ of the participants: “it is the generated abstraction from their doings and their meanings that are taken as data for the conceptual generation” (p. 25) as the description of what has been said by the participants is conceptualised and theorised. Charmaz (2014) on the other hand, with the *constructivist* model of grounded theory adopted, see the participants as integral to the theory generation and even goes as far as seeing them as co-constructing the theory with the researcher, particularly through the type of interviewing. In this approach participants are given agency.

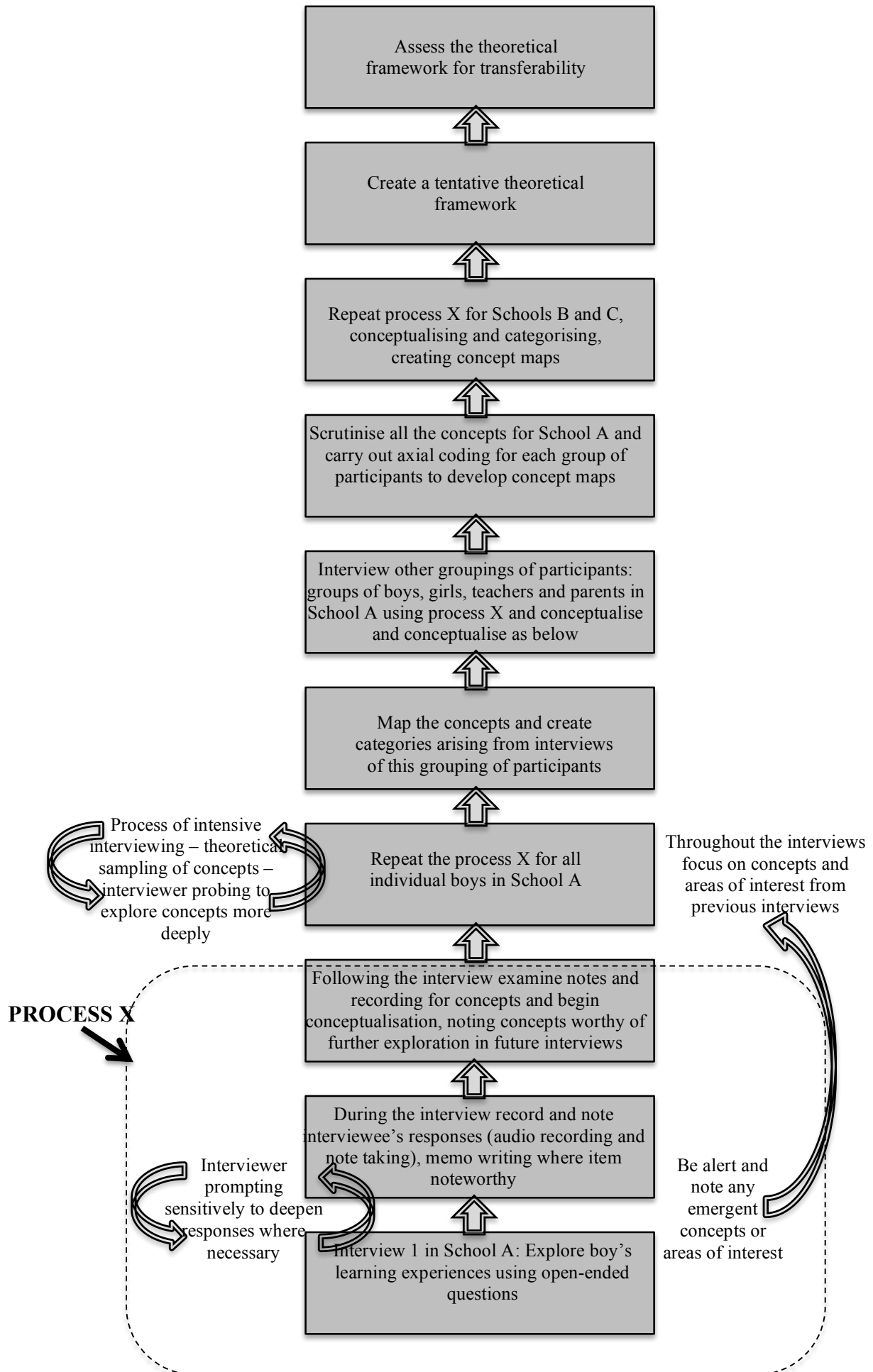
In this research, because of the limitations of being able to go back to the same participants to check out the ideas and hypotheses emerging at the time of the analysis, because of no longer working within the school, there was no attempt to seek the views of participants about any theory. There was also no attempt to co-construct a theory at the time of interviewing the participants. The interviewing technique as explained earlier gave pupils a ‘voice’ that gave opportunities to share their thoughts about learning rather than explore why boys appeared to be performing less well than girls amongst this particular cohort of academically able pupils.

### **7.3 Analytical method (including diagram of process)**

The following section gives a description of the process in broad outline (illustrated in Fig 7.1) used to develop a tentative theoretical framework for the phenomenon in School A. The same process was repeated in Schools B and C to explore transferability of the theoretical framework. A worked example has been provided in Appendix 10, which illustrates and explains how this process was used to reach the position of proposing an emergent theory. Note only extracts from transcripts has been used in Appendix 10.

As mentioned previously, individual boys shared their views on their learning, not from a prescribed list of questions but through a small number of open-ended questions. The interviews were audio recorded, transcribed and coded. Tentative concepts emerged from the first few interviews, for example ‘having an awareness of effective learning/enjoyable learning’; ‘realising the need for work ethic’; ‘having self-awareness of barriers to learning’; ‘perceiving the influence of the teacher on learning’; and ‘voicing boys’ learning from a gendered stance’. In subsequent interviews, the same open-ended questions were used, but where it was natural to do so the emerging concepts were explored through interview.

**Fig 7.1: Process Diagram**



There was a continuously iterative and comparative process ongoing throughout the schedule of interviews by reading and scrutinising the qualitative data gathered through interview, coding the data and then taking an analytical stance to seek patterns, concepts, provisional categories and then exploring these in further interviews. This process was carried out for all of the eighteen interview coded transcripts. At the end of the schedule of interviews, the data and initial coding were examined and re-examined to consider the meaning of the points and views expressed, and to develop the concepts, moving from description to abstraction, and categories, which emerged from the data. This process of interview, transcription, coding, conceptualisation and categorisation was repeated for all of the groups of interviews in all three schools. This process relied on both induction and abduction, and deduction when considering the transferability of the emergent theory.

Draft diagrams were created to give a pictorial representation of the concepts emerging, to illustrate the categorisation and conceptualisation of the data. These diagrams developed into 'conceptual maps' as they were refined, and presented the concepts in a cogent and accessible form. Conceptual maps were created for each group being interviewed in each school. The concepts and properties were shown as boxes on these 'hierarchical' maps, as they emerged. Some of the initial concepts became properties of the higher level concepts, for example 'groupwork/peer learning' and 'active' learning' became properties of 'engaging learning methodology' and these were illustrated on the map as smaller boxes. Dimensions were added to the map of concepts, by sizing the concept boxes, to illustrate the frequency and potential importance of the provisional concepts inferred from the interviews. The size and length of the boxes in the maps are meant to be impressionistic and cannot be verified as directly proportionate to level of importance. The participants shared their thoughts, views and impressions during one interview and at one time. To try to establish a more robust quantitative representation would have demanded more time and possibly repeated opportunities to exhaust all thoughts in relation to the topic under investigation. This is not expected through a grounded theory approach and could have detracted from the spontaneity of responses. Some boys may have voiced ideas and thoughts that were at the front of their minds that day, but there may have been other thoughts or ideas that were pertinent to this research that they did not voice that day but were within their experience of learning.

The next chapter presents the analysis of the data gathered from the interviews based on the principles and method discussed in this chapter.

## **Chapter 8: Presentation of the grounded theory analysis of the empirical data gathered through interview**

### **8.1 Chapter overview**

In seeking to respond to the research questions posed in Chapter 2, this chapter presents the analysis of all the interviews. The outcomes of the analysis of the interviews are presented as conceptual maps for each group of participants under the key categories which emerged from the grounded theory analytical process. The emerging grounded theory is presented. Triangulation of the findings from each of the groups in each school is discussed. The chapter concludes by comparing the findings from School A with the other two schools to see what tentative conclusions can be drawn about transferability of explanations of boys' apparent underachievement.

### **8.2 Research questions**

5. What are the perceptions of academically able advantaged boys of their learning, including learning experiences that help learning, and learning experiences that hinder learning?
6. What part, if any, does gender and gender construction play in influencing an academically able advantaged boy's learner identity?
7. What are the perceptions of learning from the perspective of girls, teachers and parents and how do these compare with the perceptions of academically able advantaged boys?

### **8.3 Rationale for presentation of analysis of empirical data**

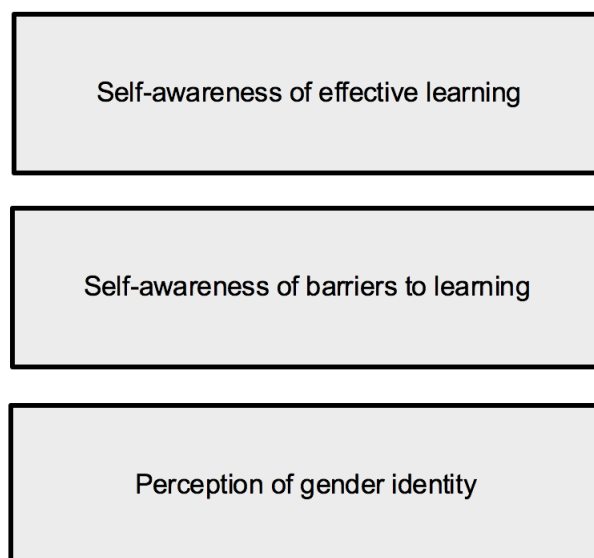
The analysis followed the process illustrated in Fig 7.1, outlined in section 7.3. and detailed in Appendix 10. The development of a conceptual map is also elaborated in section 8.4. Conceptual maps have been used to present the analysis of the data because they give a clear picture of the concepts and how they are linked to the key categories emergent from the analysis, and they allowed comparisons to be made between the different groups who were interviewed, which aided triangulation and considerations of transferability.

The three broad categories that appeared to be most prominent emerging from the



conceptualisation of the individual boys' interviews were '**self-awareness of effective learning**'; '**self-awareness of barriers to learning**'; and '**perception of gender identity**'.

**Fig 8.1: Emergent categories**



The concepts emerging from the interviews with all the focus groups clustered within these three categories. The first two categories were used as the organisers for 'hierarchical' conceptual maps, with the codes linked to the third category presented as a list. For teachers and parents one conceptual map was created for the category '**perceptions of factors influencing boys' learning**', which fitted with both the views expressed and the stance taken of using the views of the teachers and parents to triangulate the evidence arising from empirical data gathered from the pupil 'voice'.

To mirror the logical and systematic grounded theory approach used to come to an emergent theory in this study, the process of presenting the analysis follows the same path. The findings from School A have been presented first, beginning with the conceptual maps for the individual boys and the focus groups of boys, and then comparing these for similarities and differences. A tentative theory based on the perceptions of the academically able boys, the focus of this study, was proposed at this stage.

For the triangulation process in School A, conceptual maps are presented for the girls, teachers and parents. Comparisons of the conceptual maps follow, beginning with a comparison of the findings from the girls' focus groups with those of the boys' focus groups. In an attempt to compare like with like from a group perspective, the boys' focus groups were used for comparison rather than the individual boys. This was also justified

because the comparison between the analysis of the individual boys' interviews and boys' focus group interviews (section 8.4) showed marked similarities. However, where pertinent, reference has been made to the data collected through interviews with the individual boys. The boys' views were then triangulated with the concepts arising from the teachers' and the parents' interviews. The rationale was to compare the perspectives of the girls, teachers and parents with the boys' perspectives.

Teachers were interviewed because of their role in pupils' learning and their professional interactions with pupils, to seek their views from a professional's standpoint on the learning of boys and the learning of girls and any differences. Triangulating with teachers was done to see if boys' views were in accord with teachers' views, and to seek any additional concepts emerging from the teachers' perspectives. The aim was not to go into the teachers' interviews in forensic detail but to draw out concepts and ideas that were relevant to the learning of boys in School A.

The role of parents in a child's learning is well documented. Seeking views of parents of some of the individual boys interviewed was done to explore both boys' learning from the stance of a parent, and what other influences beyond school might be impacting on learning. The last stage in the process was to triangulate the findings, drawing some tentative conclusions about boys' learning. In the same way, for triangulation, the conceptual maps of boys, girls and teachers were compared in the other two schools.

The final part of this process was to compare the findings in School A with the other two schools to explore transferability of the tentative theory emerging from the analysis of the boys' 'voices' in School A.

Where relevant the discussion is supported with reference to extracts from the interviews, and summaries of the codes assigned to the data, which allows more than one participant's view to be cited or in the case of the groups, the group's views. The critique, in Chapter 9, of the conceptualisation of the perceptions of boys' in School A draws on extracts and summaries of codes from the boys' interviews. Table 8.1 gives the codes of the different groups.

**Table 8.1: Coding for the individuals and groups interviewed**

School	Individual boys	Year group	Groups of boys-code	Groups of girls-code	Teachers	Parents
A	B1 - B18	S4	BA4	GA4	T1-T13/ SA14*	P1-P4
		S5	BA5	GA5		
		S6	BA6	GA6		
B		S5	BB5	GB5	Treated as one group and so no code assigned	
		S6	BB6	GB6		
C		S5	BC5	GC5	Treated as one group and so no code assigned	
		S6	BC6	GC6		

\*SA14 - support assistant

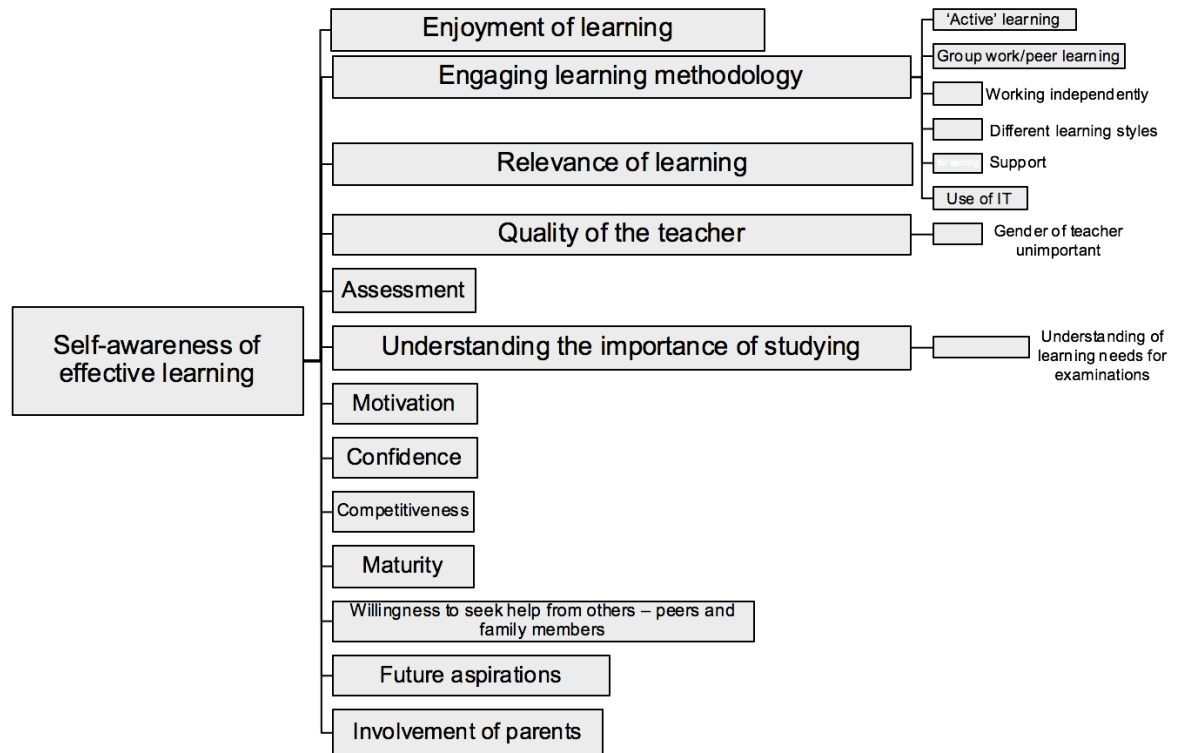
#### **8.4 Presentation of analysis: School A - boys**

The focus was on the views of individual academically able boys and this was the starting point for the analysis. This was followed by analysis of the views of the groups of boys in School A to explore further the concepts and categories emergent from the views of the individual boys.

##### ***Individual boys (School A)***

The following Figs, 8.2 and 8.3, are the final conceptual maps for the two categories of ‘self-awareness of effective learning’ and ‘self-awareness of barriers to learning’. As explained in the last chapter the iterative process of analysis led to constant refinement of both the concepts and the conceptual maps. Appendix 10 explains the process in more detail including how, with the iterative process, the concepts changed during the analysis.

**Fig 8.2: Category: ‘Self-awareness of effective learning’– individual boys**



The map attempts to take all the concepts and group them hierarchically. For example, the concepts ‘active learning’, groupwork/peer learning’, ‘working independently’, ‘different learning styles’, ‘support for learning’ and ‘use of IT’ are all grouped together and become *properties* of the concept of ‘engaging learning methodology’ as shown by the lines connecting these on the map. Although they are concepts they are renamed *properties* as they provide additional information about what boys perceive ‘engaging learning methodology’ to be. Similarly, the concepts linked directly to the category ‘**self-awareness of effective learning**’ are *properties* of this category as they qualify what is meant by effective learning from the stance of the boys. The delineation into category, concepts and properties is explained in Appendix 10.

**Fig 8.3: Category: ‘Self-awareness of barriers to learning’– individual boys**

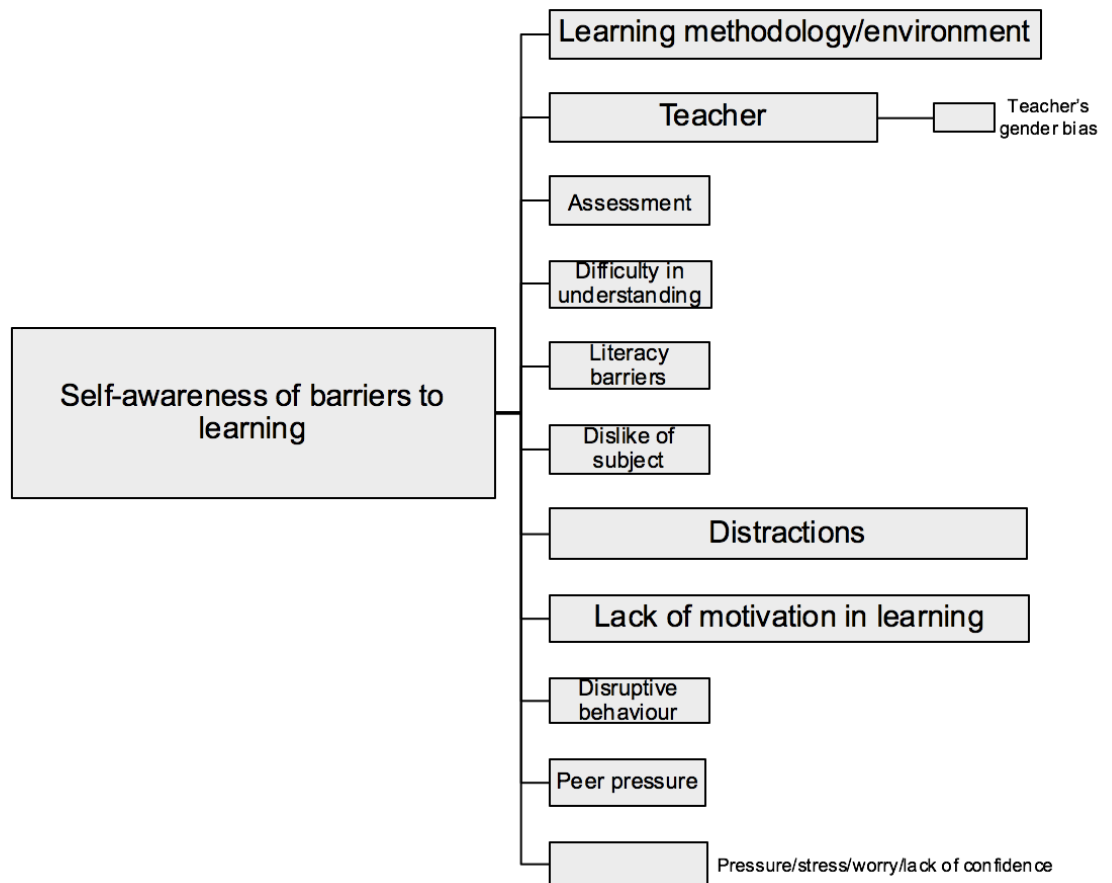
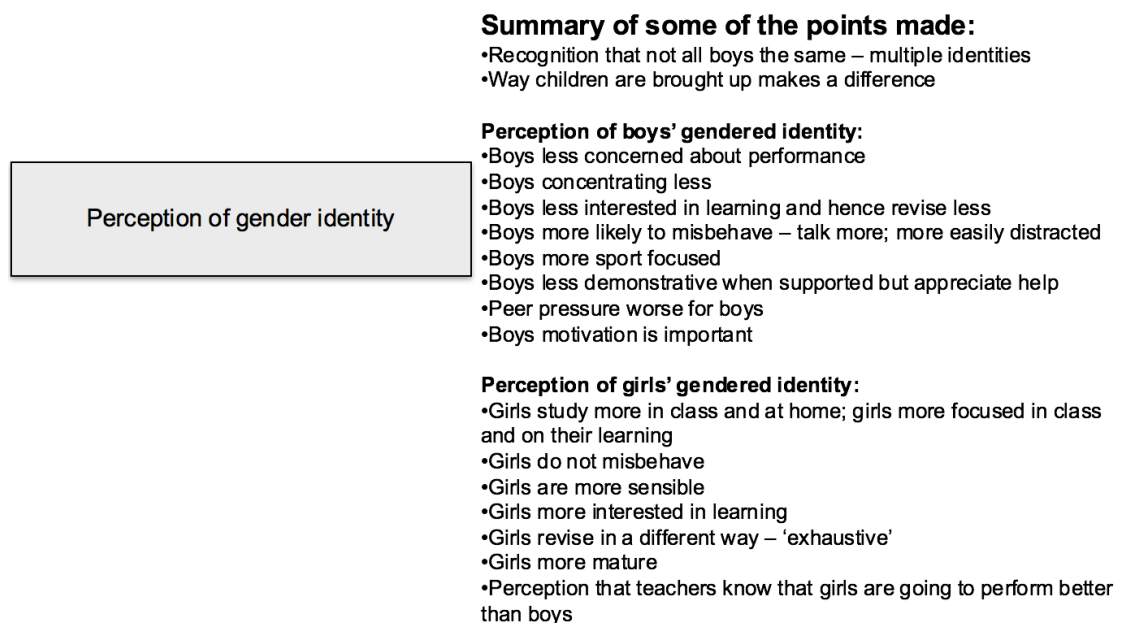


Fig 8.4 gives the key concepts inferred from the coding of the individual boys’ interviews to illustrate the category of ‘**perception of gender identity**’. The nature of the responses did not facilitate a ‘hierarchical’ conceptual map as the other two categories had.

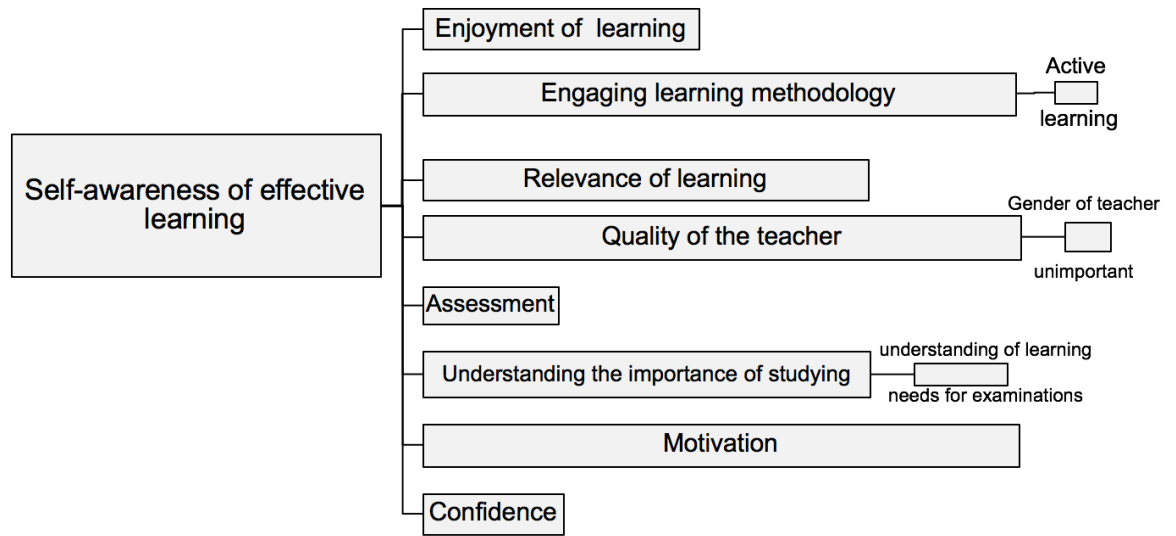
**Fig 8.4 Category: ‘Perception of gender identity’ – individual boys**



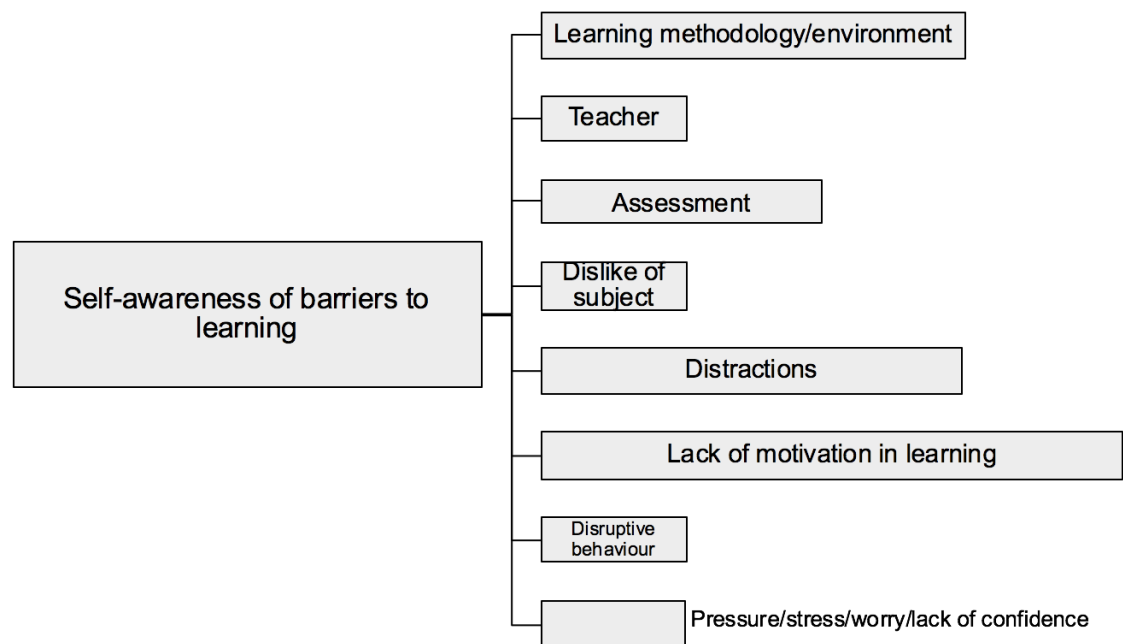
### *Boys' groups (School A)*

Figs 8.5 and 8.6 show the conceptual maps for the two categories ‘self-awareness of effective learning’ and ‘self-awareness of barriers to learning’ respectively. Fig 8.7 illustrates the concepts emerging for the category: ‘perception of gender identity’.

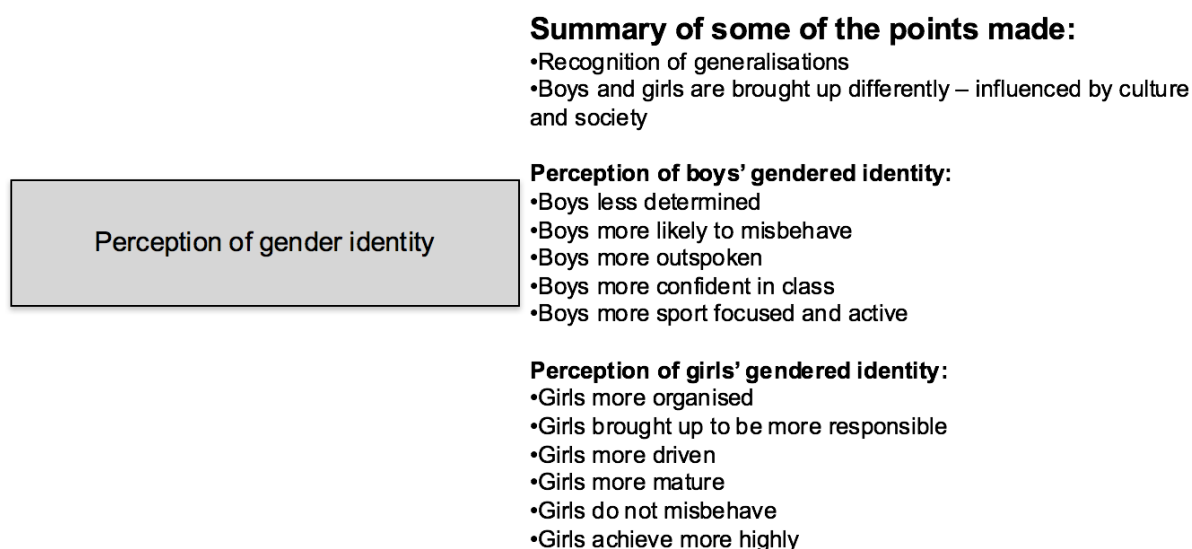
**Fig 8.5: Category: ‘Self-awareness of effective learning’ – boys’ focus groups (School A)**



**Fig 8.6: Category: ‘Self-awareness of barriers to learning’– boys’ focus groups (School A)**



**Fig 8.7: Category: ‘Perception of gender identity’ – boys’ focus groups (School A)**



### **8.5 Comparison between the findings from the individual boys' and the focus groups of boys' interviews in School A**

The aim of interviewing groups of boys was to see how the views and concepts expressed by the focus groups of boys compared with those of the individual boys, to determine if the concepts were similar or if there were notable differences.

#### ***Category: ‘Self-awareness of effective learning’***

In the map for the analysis of the individual boys' interviews there is more emphasis on ‘enjoyment of learning’, ‘relevance’, ‘understanding the importance of studying’ and ‘involvement of parents’, and less on ‘motivation’ than in the focus groups of boys. However, the caveat here is the boxes are to show an impression of attention given to a particular concept and is not meant to be an accurate quantitative measure. Concepts that did not occur in the focus groups were ‘competitiveness’, ‘maturity’, ‘willingness to seek help from others’, and ‘future aspirations’. One explanation could be that saturation had not been reached in the case of the focus groups of boys, but the rationale for using focus groups was to test the concepts arising from the individual boys' interviews rather than the same level of enquiry as for the individual boys.

Inspecting the individual codes leading to the concepts in this category showed no differences in the detail of the points made. For example, although ‘motivation’ appears to have more prominence in the focus groups of boys, the substance was the same with interest, enjoyment and links to future careers and the outside world being the key points

made. An additional point made by the individual boys was that a teacher can be motivational, which triangulates with the data under ‘quality of the teacher’.

***Category: ‘Self-awareness of barriers to learning’***

The maps for the individual boys and the focus groups of boys are very similar with notable differences being that more attention is given in the individual interviews to the concept of the ‘teacher’ being a barrier. In both cases, this is related to the lack of relationship with the teacher.

***Category: ‘Perception of gender identity’***

The analysis of the views expressed by both the individual boys and the groups of boys suggest an essentialist view with boys and girls considered as being different, with characteristics that suggest two genders rather than a multiplicity of identities. Although this was the overriding impression from the data gathered, there were some points made that suggested that not all held these views, with one view that there was no difference in how boys and girls learn (BA6), or in their motivation to learn (BA6). Literacy was not considered a gender issue (BA5). The interviews with the focus groups of boys produced views that were also polarised with only one voicing that not all boys are the same.

Overall there was broad agreement between individuals and groups of boys’ views.

## **8.6 The emergence of a tentative theoretical framework based on the boys’ views**

Based on the boys in School A alone, a tentative theoretical framework began to emerge, grounded in the data, centred around boys’ self-realisation of their learning to bring them success in their learning, but despite this self-realisation, the boys appeared to be limiting their own success by an essentialist gender construction of gender being bipolar. ‘Self-realisation of learning’ refers to the development of an understanding, on the part of an individual pupil, of themselves as learners and of their own learning. Boys appeared to be able to voice what they believed was required for effective learning, including what hindered learning but they also assigned characteristics to themselves which were stereotypical and also assigned these to other boys. They also voiced views about girls as learners that indicated a gendered polarised stance. The theory formulated at this stage to give an explanation of the gendered pattern of attainment was:



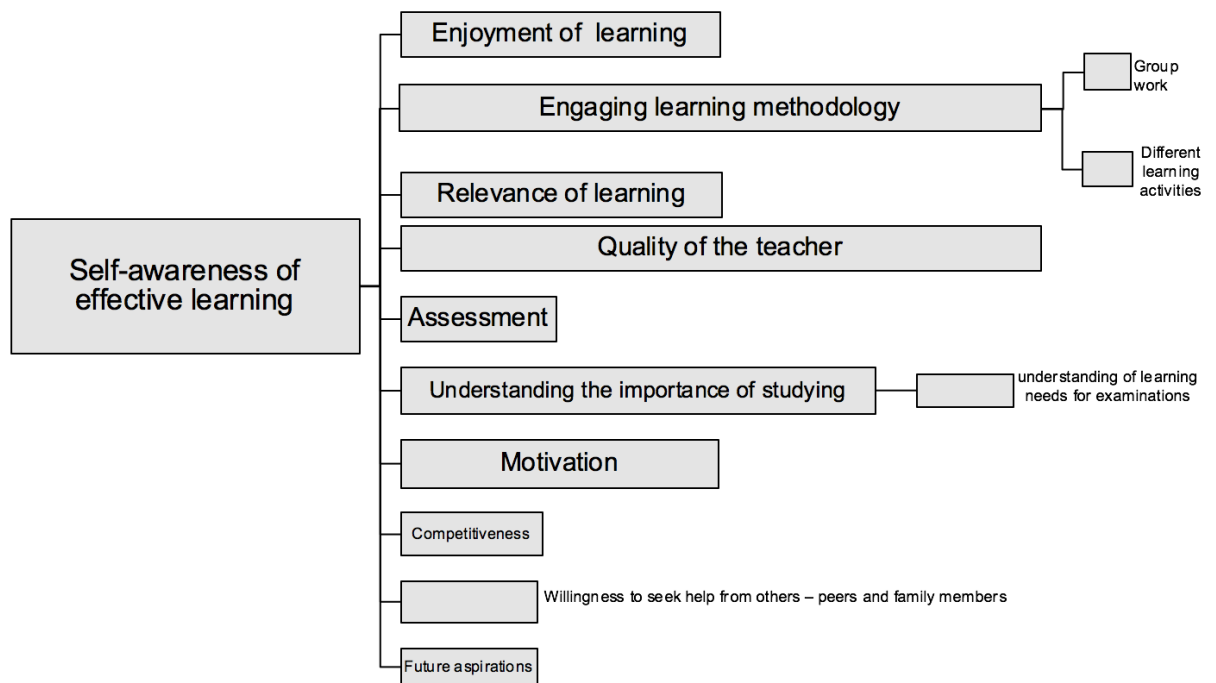
Boys’ self-realisation of successful learning is being limited by an essentialist construction of gender, with gender stereotypical characteristics. Gender is constructed as being bipolar and with these two categories being mutually exclusive.

### 8.7 Presentation of the analysis: School A - girls, teachers and parents

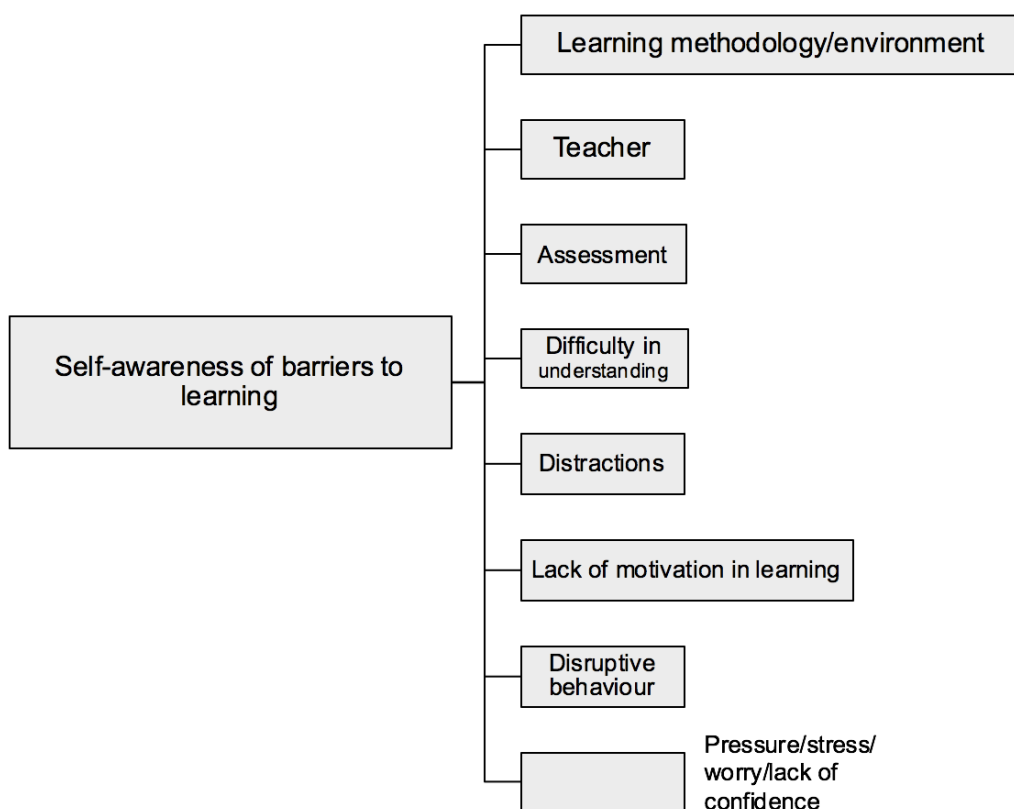
This section presents the data from the interviews with girls, teachers and parents in School A, in the form of conceptual maps.

#### *Girls’ groups (School A)*

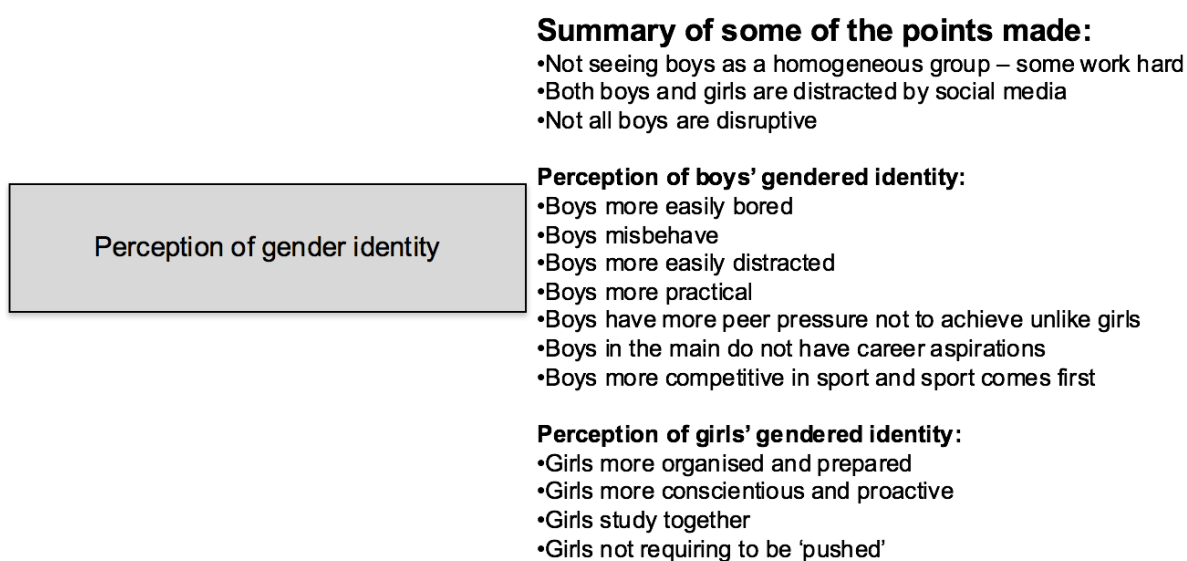
**Fig 8.8: Category: ‘Self-awareness of effective learning’– girls’ focus groups (School A)**



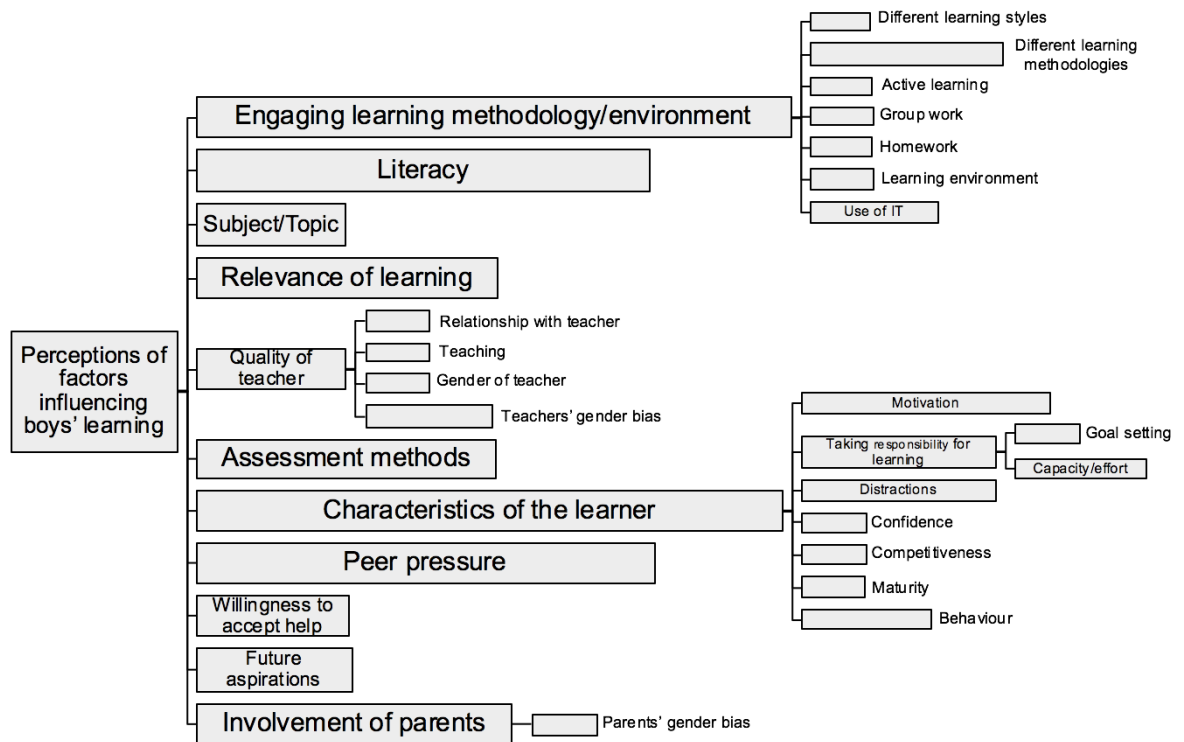
**Fig 8.9: Category: ‘Self-awareness of barriers to learning’ – girls’ focus groups (School A)**



**Fig 8.10: Category: ‘Perception of gender identity’ – girls’ focus groups (School A)**



**Fig 8.11: Category: ‘Perceptions of factors influencing boys’ learning’ - teachers (School A)**

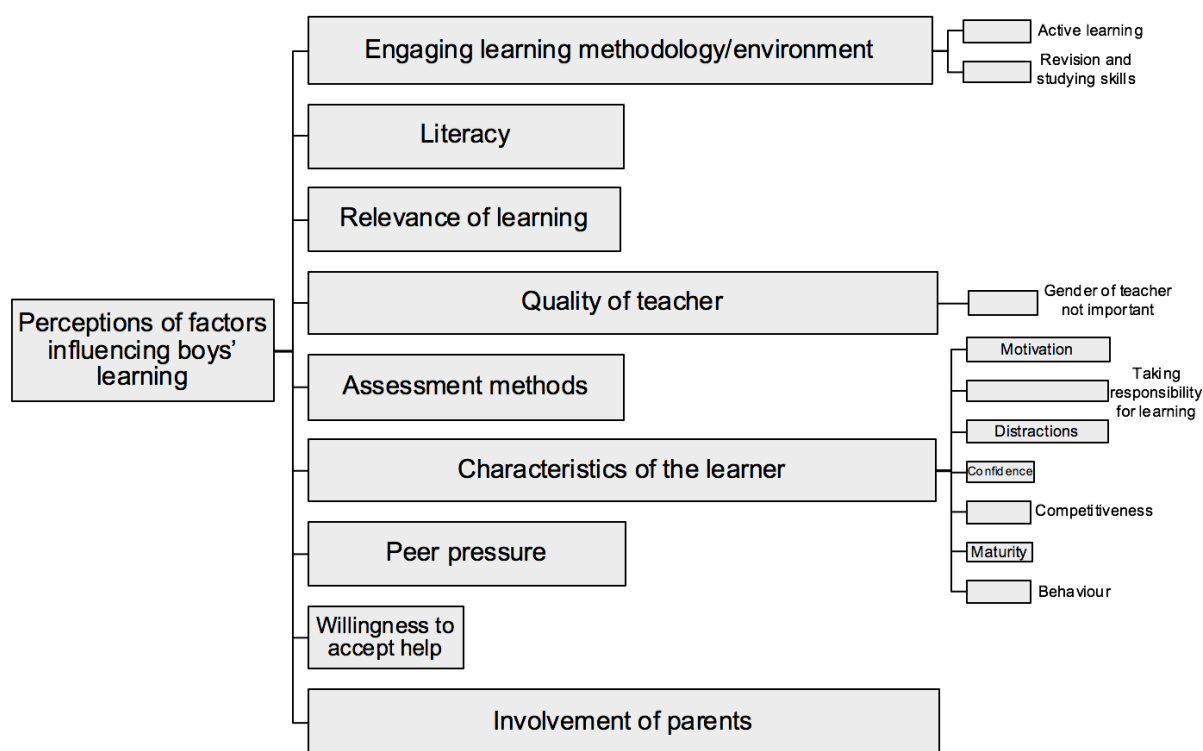


### ***Parents (School A)***

Despite there being only four parents who participated in the interviews, they gave full and well considered responses which were very valuable for this study. This allowed a different perspective to be considered, one which goes beyond the school but is influential in the lives of young people. These interviews were carried out after almost all of the other interviews had been completed and so there was a rich tapestry of concepts that had emerged from the data already gathered that could be used to compare with the concepts emerging from the parents’ interviews.

<sup>32</sup> ‘Teachers’ is a generic term used throughout to refer to the staff who were interviewed. Thirteen of the teachers were teachers and one was a pupil support assistant working in classrooms with teachers supporting children with their learning.

**Fig 8.12: Category: ‘Perceptions of factors influencing boys’ learning’ – parents (School A)**



## 8.8 Comparison between findings from the girls’ focus groups and the boys’ focus groups in School A

The conceptual maps for the girls’ focus groups compared with the maps of the boys’ focus groups in School A show the concepts to be generally concordant. Some detail by way of illustration is given below under the three key categories and draws from the interviews and the synthesis of the codes.

### *Category: Self-awareness of effective learning’*

The concepts and the properties of the concepts for the girls’ focus groups were very similar to those inferred from the boys’ focus groups. The prominent concepts were:

- ‘enjoying learning’;
- ‘engaging learning methodology’, with girls highlighting ‘groupwork’ and ‘different learning activities’, which was similar to boys, with girls adding that they believed that learning was improved through seeking pupils’ opinions about their learning;
- ‘quality of the teacher’, where there were mixed views amongst the girls on the importance of the gender of the teacher, but overall the gender of the teacher was

not seen as important; and

- ‘understanding the importance of studying’.

The concept of ‘involvement of parents’ was only mentioned once as important in influencing learning (GA6). There was also no attention given to literacy. Assessment was given little prominence but what was raised was that continuous assessment appeared to be favoured by the girls, which was broadly the view of the boys.

There are some differences between the girls’ focus groups and boys’ focus groups within the category of **‘self-awareness of effective learning’**. There is more prominence of ‘relevance’ and ‘motivation’ in the boys’ groups, particularly motivation, and the points made had a different focus. Boys gave a sense of motivation being linked to enjoyment of a subject, future aspirations and the teacher:

*“If it is a subject you enjoy more, you are going to put more effort in, concentrate more and focus more” (BA5).*

*“I take Sociology this year and I am not a big fan of it but I need to do it and I still want to do well in it and that allows me to ... get a job” (BA6).*

*“If you don’t like the teacher you don’t really work as well. If you like the teacher, you are more likely to work better ...because you are more motivated to learn more” (BA4).*

With girls there was more of a focus on persistence and work ethic with and without supporting future aspirations. There was mention of girls being able to transcend disruptive behaviour of others:

*“Because it is our Higher Year ... grades, going to Uni, we have to have persistence to work hard” (GA5).*

*“...for everyone that is willing to learn. There are people in the class who are talking all the time ... she [the teacher] doesn’t need to sit us down and tell us exactly what to do...” (GA4).*

Girls discussed ‘competitiveness’ in the context of peer pressure on girls to do well academically. Boys mentioned competitiveness but from the perspective of sport and not academic study. This was also a view expressed in the interviews with the individual boys.

‘Future aspirations’ appeared to be more overt for girls, particularly gaining university entrance. One group of girls believed girls had clear ambitions for the future and compared this to how they perceived boys:

*“I think if you ask in our year the majority of girls will have an idea of what they really want to do...There is a select few boys in your year that are really passionate and know what they want to do when they leave school but if you ask the rest they have not thought really” (GA6).*

‘Confidence’ was not mentioned by any of the girls. There were mixed views amongst the boys, although this was not a prominent concept amongst the boys.

***Category: ‘Self-awareness of barriers to learning’***

The concepts and their properties and dimensions were similar for both boys’ and girls’ focus groups, with the concept of ‘learning methodology/environment’ drawing the same amount of attention, with copying from the board being a prominent point made by the boys and echoed by the girls (GA4).

The concepts worth highlighting, where there were differences between the boys and the girls, are ‘distractions’ and ‘lack of motivation’ which were more prominent in the boys’ groups. Both groups gave mobile phones and social media as distractors with boys seeing distractions in general as more of an issue. ‘Lack of motivation’ for the girls centred on not liking, not understanding or not seeing the relevance of learning, whereas boys attributed their lack of motivation to their own traits and those of boys, for example being “*laid back*” (BA5), “*not stressing about school*” (BA5), laziness (BA5), “*giving up easily*” (BA5), and disruptive behaviour (BA5).

***Category: ‘Perception of gender identity’***

The views expressed pointed to girls’ perceptions of their identity as conscientious, organised and self-disciplined. They also expressed views about boys that were generally stereotypical, centred on boys misbehaving and being more easily distracted as well as peer pressure being an issue for boys academically.

*“They [boys] just end up disrupting the whole Higher class...All the girls want to learn but the boys just want to have a conversation” (GA5).*

However, there was a sense that girls did not always see boys as a homogeneous group, with not all boys being seen as disruptive or not achieving.

*“I think it is a certain type of boy who puts effort in to their work. I think that certain boys, probably from the way they have been brought up as well, not that I am saying that they should share the same traits as some girls do, like if it is their manner. I think it is the more gentle boys that do better in skills than the harsh boys. There are boys in the year who know what they want to do and I think it is the way that they have been brought up to care more about the academic” (GA6).*

The point above suggests a view that boys who work are different to the hegemonic masculinity that most display.

Views were expressed about parents from a gendered stance but the groups were not in

accord, with one group perceiving that parents “*pushed*” boys more (GA4) and others suggesting that parents focus more on encouraging their daughters to study (GA5). There were mixed views about how boys and girls are treated by their parents – some seeing no difference, others describing gender stereotypical responses from parents, suggesting that boys and girls had different activities and toys when younger (GA6).

In summary, the findings from the interviews with the groups of girls was very similar to the findings from the interviews with the boys, when the findings from the individual boys are taken into account. Girls had a strong sense of what supported and hindered their learning. They gave detail that showed their depth of understanding and self-realisation. Like the boys, they understood themselves as learners. Overall, girls generally conceptualised their identity and those of boys along gender stereotypical lines.

### **8.9 Comparison between the findings from the teachers and the boys in School A**

There was general agreement between the points made by the boys and the teachers, both in what they believed supported boys’ learning and what acted as a barrier. There was also voicing of boys and girls being different in how they approached and engaged in learning, which agreed with the views of the boys. To aid the discussion on the comparative analysis, this section has been divided into *extrinsic influences*: those aspects of learning that are external to the learner, for example ‘learning methodology’, ‘relevance of learning’ and ‘quality of the teacher’; *intrinsic influences*: those aspects that are coming from the learner themselves, for example ‘motivation’, ‘responsibility’ and ‘behaviour’; and *conceptualising gender identity/learner identity*.

#### ***Extrinsic influences***

The main points of agreement included the learning methodology that would engage boys: ‘active learning’, ‘groupwork’ and ‘different learning styles’; ‘relevance of learning’; and the ‘quality of the teacher’. Most boys viewed groupwork positively, “*I think everyone likes groupwork because get to interact with fellow class mates*” (B18). However, there was a view that not all boys liked working in groups, with particular mention of high achieving boys who preferred to work individually.

*“Significant group of boys - high achieving boys - very focussed, like to work individually, almost sense when trying to do cooperative things irks them because they feel that they are going to have to drag along other people who are not as willing as they are” (T9).*

The boys placed an emphasis on relevance which was also emphasised by teachers, *“Lads are aware and are trying to make a link between what they are doing and the outside”* (T7). Teachers believed that relevance benefitted all pupils, *“Making lessons good, interesting and seemingly relevant is going to be beneficial for everyone”* (T12). *“Conscientiousness, we associate with higher achieving girls ... the girls think that although I cannot see the link and certainly would not vocalise it, but the teacher has asked me to do it and so I am going to do it.”* (T7). This point illustrates the view of the teacher from their stance as a professional of the perceived differences between higher achieving boys and girls.

The quality of the teacher was a point that was emphasised strongly by boys, but did not draw the same level of attention from teachers. However, the boys and the teachers were in accord, particularly in relation to relationships with the teacher: boys needing to respect the teacher (T10), and have trust in the teacher (T7). One teacher talked about boys needing to ‘feel safe’. *“Boys want to feel safe and they want to be respected”* (T10). As voiced by almost all the boys, the gender of a teacher was not seen as significant (T13).

In relation to teachers’ gender bias, which was raised by some boys, most of the teachers emphasised that boys and girls were not treated differently in terms of learning (T6, T11, T12, T13). However, one teacher reported a conversation with groups of boys where they perceived that they were judged by their gender.

*“They feel that they are judged as boys and girls, and there is more shock if girls misbehave or do not do their homework”* (T11).

Where teachers believed that boys and girls were treated differently it was because boys were different and behaved differently and for that reason received more attention (T2).

Parents were viewed by both teachers and boys as being supportive and having high expectations.

### ***Intrinsic influences***

What has been assigned as a concept from the teachers’ interviews, ‘characteristics of the learner’ drew much attention, with particularly motivation and the lack of motivation being a barrier. This is in strong agreement with the boys’ findings. For example, teachers cited boys being motivated when interested (T11, T13), with underachievers generally being boys because they were less engaged (T11). Girls were cited as having more drive. *“There is more drive, more focus from the girls”* (T8), and more intrinsic motivation: *“The girls*



*have this intrinsic motivation, 'I know where I am going', and 'I will have success at the end'' (T4).*

Boys were cited as not taking responsibility for learning (T11, T12) in the same way as girls (T4) which was also a point made by boys, *"I can see that girls are more focussed in class, more zoned in their learning"* (B9), and, *"Girls do far more homework/ projects and spend more time than boys"* (B5). Boys were perceived as just doing enough (T8) and not maximising effort with more girls willing to do extra (T11). One teacher suggested that boys had high aspirations to reach university but did not appear to appreciate the amount of work needed (T6). However, one teacher suggested that in S5 and S6 there was no difference between boys and girls in terms of application, which was echoed by one of the boys, *"I did not do well in my prelims [in S5]. I have now started studying so it has started to work for me again"* (B12).

Although boys did not raise poor behaviour as a major barrier to learning, there was a strong sense amongst teachers that disruptive behaviour of boys was a barrier to their learning (T3, T7, T11, T12, T13), with boys demanding more attention (T2) and hence teachers being stricter with boys (T2), setting boundaries and high expectations (T12). Boys were also seen to be more easily distracted, a common view amongst the boys, *"Boys are distracted a lot easier"* (B14).

*"I think boys lack focus. They are much more easily distracted. This is reflected in the shallowness of their learning where girls can get into something and get deep and focus and keep arguing about it until they get their point across"* (T2).

Maturity drew little attention from the boys and mixed views from the teachers (T1, T4, T6, T7, T12) but on balance boys were viewed as less mature by the teachers (T4, T6, T7, T12).

Both for boys and the teachers, peer pressure to eschew being academic, was not regarded as being present in School A (T7, T10, T11, T12), *"Pressure to be clever. Some boys at the moment (prelim time) will pull it out of the bag because they do not want to be seen as a failure"* (T10). Although one teacher remarked, *"In my fifth year class, the girls hold back because they do not want to be seen as swots, whereas the boys are quite happy to be very clever"* (T2) and another voicing, *"Some boys in the school are popular and are very diligent"* (T12).

One difference found from interviewing the boys and the teachers was the little attention

given by the boys to literacy, and yet this was a barrier to learning raised by teachers both in terms of writing (T2, T4, T5, T10, T11), and with boys having more confidence in talking (T2, T9, T13).

A concept that did not draw much attention was ‘competitiveness’, other than boys citing that they were competitive in sport but not academically.

### ***Conceptualising gender identity/learner identity***

Although the aim was to focus on the factors relating to boys’ learning, I was also keen to capture any relevant issues related to girls’ learning, and points that suggested a gendered view of learners and their identity. This was to aid the triangulation process, drawing comparisons with how boys perceived themselves and girls from a gendered stance, as well as how girls saw themselves and boys from a gendered perspective.

The coding of the teachers’ interviews suggested that almost half the teachers did not see boys as a homogenous group (T2, T4, T5, T6, T7, T11). This points to more nuanced understandings of gender and individual differences. However, there were points made, some of which have been mentioned earlier in this section, that indicated that teachers thought differently of boys and girls as learners. Teachers cited factors influencing the learning of boys such as boys being more easily distracted, being more disruptive in terms of behaviour, and perceiving boys not taking responsibility for their learning in the same way as girls. Girls were seen as driven, more conscientious and with higher standards of behaviour, but also girls not speaking up and boys speaking up all the time suggesting masculine hegemonic behaviour, *“The girls wouldn’t speak out in groups when the boys were there because the boys were more powerful in the class”* (T2). All of these views pointed to seeing boys and girls as two homogeneous groups. This binary view of learner identity by gender was a view echoed by the boys.

‘Social factors’ was the dominant explanation given by the teachers for the differences between boys and girls, seeing socialisation as all-pervading (T11), and from an early age (T2) with girls and boys doing different activities: boys being encouraged to be *“little soldiers”* and girls *“play mummies”* (T11).

*“From infancy boys and girls are treated differently - girls are taught to sit passively. Taught to be polite etc. that is how little girls are brought up. In a society we keep doing that. With boys we encourage to explore to have adventures, to be loud, to be competitive”* (T13).

Stereotyping in the home was raised with the male and female role models that boys and girls see (T6). Similar points were made by the boys:

*“Girls are generally more driven to do well. If boys are not good at something they just give up.”*

VC *“Why is that?”*

*“Cultural thing again.”*

VC *“You have mentioned culture. What does that mean to you?”*

*“It is just the done thing in our society. It is the way males and females are brought up differently throughout all their lives. It is about our culture in society – it seems to shape and design what a person is”* (BA5).

### **8.10 Comparison between the findings from the parents and the boys in School A**

The concepts that drew most attention from parents were ‘learning methodology’, ‘quality of the teacher’, ‘characteristics of the learner’, and ‘involvement of parents’. These are generally in accord with the findings from the boys’ interviews, although the boys did not place prominence on the involvement of parents.

The parents’ focus within ‘learning methodology’ was ‘active learning’, believing boys engaged and responded better through active learning (P2, P3), which was a point made by the boys, *“Hands on work...keeps you more occupied and learn better”* (B2), *“Do practical examples of things”* (B18). They claimed that boys were not able to sit and listen for long periods (P4). Another point raised by the boys and by parents was relevance of learning being seen as important in relation to career aspirations (P2), and interest (P4).

There was emphasis on the quality of the teacher and the relationships with the teacher making the difference (P2, P3, P4) with the gender of the teacher not being seen as important (P4).

In terms of the *intrinsic influences* - ‘characteristics of the learner’, motivation was another point that parents and boys agreed on, with parents believing that motivation was important and believing that their sons were motivated to do well (P1, P2). Motivation was seen as a driving factor particularly when there was a clear career path (P3).

The parents stressed the importance they placed on boys taking responsibility (P1, P4) and boys recognising the work load in preparation for examinations (P4). However, one parent saw boys being *“laid back”* (P4), with another parent seeing her son doing what was asked and being conscientious (P1), which suggest a view that not all boys are the same. Parents

saw boys being distracted (P2, P3, P4), again a point echoed by the boys.

Two parents cited lack of confidence due to peer groups (P1, P3). Boys' views about confidence were mixed, but this was not a prominent issue.

Two parents' views echoed boys' views on competitiveness where they believed that boys were competitive in sport with girls being competitive in academic achievement (P2), but with one parent citing her son as being competitive because he wanted to do well academically (P1).

Parents were all positive which is to be expected as they had volunteered to be part of the study and they all believed they were encouraging (P1, P4) with one suggesting that boys need to be 'pushed' (P3). Again boys voiced positive comments about their parents' support.

Literacy drew less attention from parents, as was the case for the boys. Parents believed that boys had ability in the talking element (P2) but not reading (P3, P2) and that reading hindered writing (P3).

Unlike boys who made scant reference to assessment, this was raised by parents, who did not see the current assessment methods as helpful for boys.

There were mixed views about peer pressure with two parents believing that it was present, but that their sons were able to navigate this successfully (P1, P3) and one who did not see peer pressure as an issue (P4).

### ***Conceptualising gender identity/learner identity***

There was a stance that described boys and girls as different, for example with boys being brighter than girls and it was "*just their nature*" (P4). One parent saw girls as worrying about examinations with boys not showing concern (P4). Girls were seen as being more organised, efficient (P2) and revising more (P3), with boys needing to be urged to study by parents unlike girls (P3). One parent saw little difference between her son or daughter in learning (P1), especially since her son moved into senior school.

*"I do not see a big difference. I would say she is more mature. She is more structured about her revision earlier than [REDACTED] probably did. He was 15 when the realisation kicked in for him" (P1).*

### 8.11 Triangulation of findings in School A

This section gives an overall summary of the findings in School A, triangulating the findings from the analysis. The aim of the triangulation was to draw out the main points, looking for similarities and differences. There was also a large number of interviews with a mass of data, and the conceptual maps aided the triangulation process. The triangulation was complex because of the different groups that had been interviewed. The concepts arising from all the groups were very similar, despite the fact that the teachers and parents were considering learning from a different stance to the pupils: from the stance of interacting with the learner and observing learning, rather than being the learners themselves. The process of triangulation was aided by the comparison between the analysis of the individual boys' interviews and the boys' focus group interviews and the conflation of these, and then comparing the analysis of the girls' interviews with those of the boys; and the comparison of the boys' findings with those of teachers, and parents.

#### *Category: 'Self-awareness of effective learning'*

There was general agreement between the girls, teachers and parents, which triangulated with the findings from the boys' interviews. Both boys and girls gave a sense that they enjoyed learning and were not disaffected. This would accord with this group who were advantaged and had the potential to be, or were, high achievers. Parents supported this finding and teachers gave no indication to the contrary.

The 'learning methodology' was highlighted, particularly learning that was engaging and relevant, with 'active learning' and 'groupwork' cited as being beneficial. This was true for girls and boys. The 'quality of the teacher' and notably good relationships with the teacher had prominence, and parents echoed this. There was less reference to this by the teachers but this could have been predicted as they would be giving views of themselves and there may have been a reticence to do so. The 'gender of the teacher' was not seen as important and was a point made by all the groups. 'Relevance of learning' was a prominent concept for all, with teachers and parents affirming the boys' views of relevance being important for them. Although 'involvement of parents' was not prominent, other than amongst the parents, the view was of parents being supportive and there to help.

The characteristics of pupils was raised by all. 'Motivation' was highlighted by all and had prominence. 'Taking responsibility' was the concept used for the teachers' and parents' analysis, and 'understanding the importance of studying' for the pupils' analysis. There

was a sense that boys and girls understood their roles and responsibility relating to learning and studying. 'Competitiveness' was raised by pupils, with girls seeing themselves as being competitive academically, whereas boys saw themselves as being competitive in sport. This was echoed by parents. Teachers and parents suggested that boys lacked 'confidence'. The boys' groups suggested that boys had confidence but this was not in accord with the general view amongst the individual boys.

The general view of all was that 'peer pressure' not to be seen as academic was not an issue in the school. The girls suggested that they felt peer pressure to do well academically but it was not a prominent point.

### ***Category: 'Self-awareness of barriers to learning'***

The concepts and prominence of the concepts were very similar for all groups of participants. Those where there were differences have been highlighted previously when comparing the analysis of the boys' and the girls' interviews, notably 'distractions' and lack of 'motivation' which appears to be an issue for boys. 'Disruptive behaviour' was an issue that was prominent in interviews with teachers but parents did not echo this. Boys themselves mentioned disruptive behaviour but it did not draw much attention. They and the girls suggested that it was a trait not only seen in boys but also in girls.

'Literacy', in particular writing, as a barrier was raised by teachers and parents. It was raised by individual boys from the perspective of English as a subject and less in terms of the elements of literacy.

In summary, the results of this triangulation process for the first two categories show marked agreement in almost all aspects amongst all groups.

### ***Conceptualising gender identity/learner identity***

There was a marked similarity both with how boys and girls viewed themselves, and also how they perceived each other. This was generally from a stance that demonstrates an essentialist view of gender with stereotypical gendered characteristics. The teachers gave a similar picture, with characteristics described for boys and girls that fitted with the views of the boys and girls interviewed. The parents did give an impression of boys and girls being different but with the small number of parents involved the evidence here was less robust.

What was apparent from the data collected in School A was the strong focus by all on effective learning and understanding what contributed to effective learning, and equally what could hinder learning. The analysis of the data from all the interviews related to gender identities allowed a picture to be built of how gender was perceived in School A. This was strong evidence to suggest that pupils conceptualised their own and those of the other sex along gender stereotypical lines and this was echoed in how the teachers perceived boys and girls. This is discussed in depth with reference to the literature in Chapter 9.

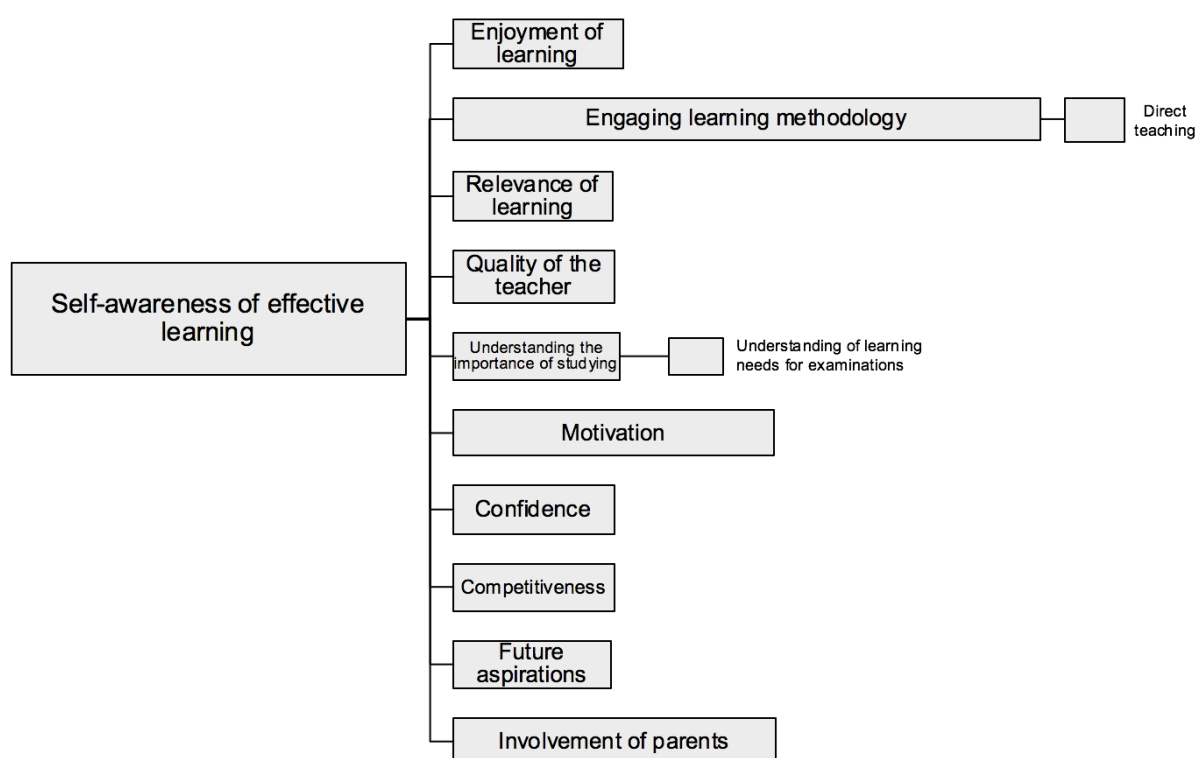
#### **8.12 Presentation of analysis: School B – boys, girls and teachers**

The number of participants in Schools B and C was fewer than in school A and so with this smaller amount of data some important aspects may not have been raised. For this reason, conclusions are tentative. The following section gives a summary of the findings for each group: boys, girls and teachers.

##### ***Boys' groups (School B)***

The boys in the S5 group were confident to air their views, whereas the S6 boys' group were less forthcoming and more supplementary questions were asked.

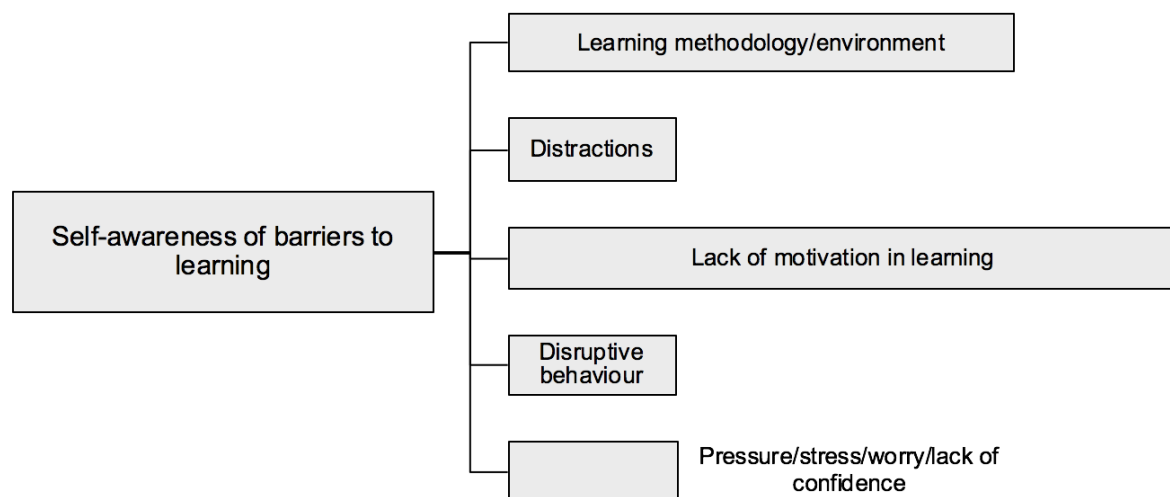
**Fig 8.13: Category: ‘Self-awareness of effective learning’ – boys’ focus groups (School B)**



The concept ‘engaging learning methodology’ drew the most attention, with a focus on direct input from the teacher (BB5, BB6) where working independently and not in groups was cited as preferable. ‘Motivation’ was linked to reaching university and this was driving learning (BB6) as well as ‘competitiveness’: to achieve more highly than peers. ‘Peer pressure’ was given a positive slant, suggesting that achievement was encouraged because others were achieving (BB5) and seeing peer pressure to do well more prevalent amongst girls (BB6). The boys suggested that there was no peer pressure in the school not to achieve (BB5). Parents were seen as supportive and influential (BB5).



**Fig 8.14: Category: ‘Self-awareness of barriers to learning’ – boys’ focus groups (School B)**



‘Learning methodology/environment’ was prominent with pressure of deadlines (BB5), copying from the board (BB5, BB6), groupwork (BB5, BB6), and pupils not willing to voice their opinions of what was helping or hindering their learning (BB5), cited as reasons for this being a barrier to learning. ‘Lack of motivation’ as a barrier was due to lack of enjoyment and interest (BB5, BB6). ‘Distractions’ were cited as outside activities: sport and IT taking time away from studying. Boys cited that *“it is more fun to muck around with all your friends”* (BB6).

**Fig 8.15: Category: ‘Perception of gender identity’ – boys’ focus groups (School B)**

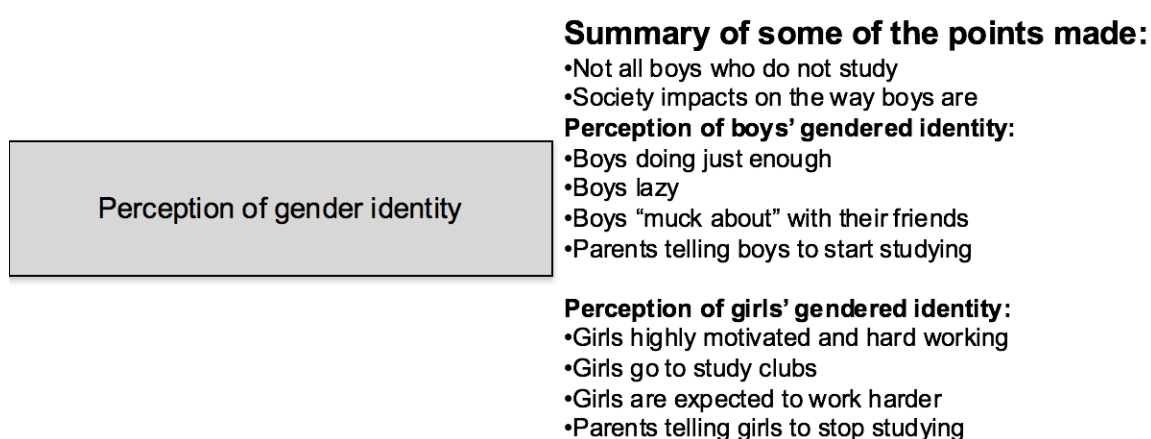


Fig 8.15 above indicates the view boys have of themselves from the perspective of their gender and how they perceive girls. This appears to be an essentialist view. This was tempered with one view of an able girl *“didn’t really put a lot of effort, like girls normally*

would, into revising” (BB5). One group believed unanimously that the way boys are is a result of society and it was difficult to see the difference schools could make.

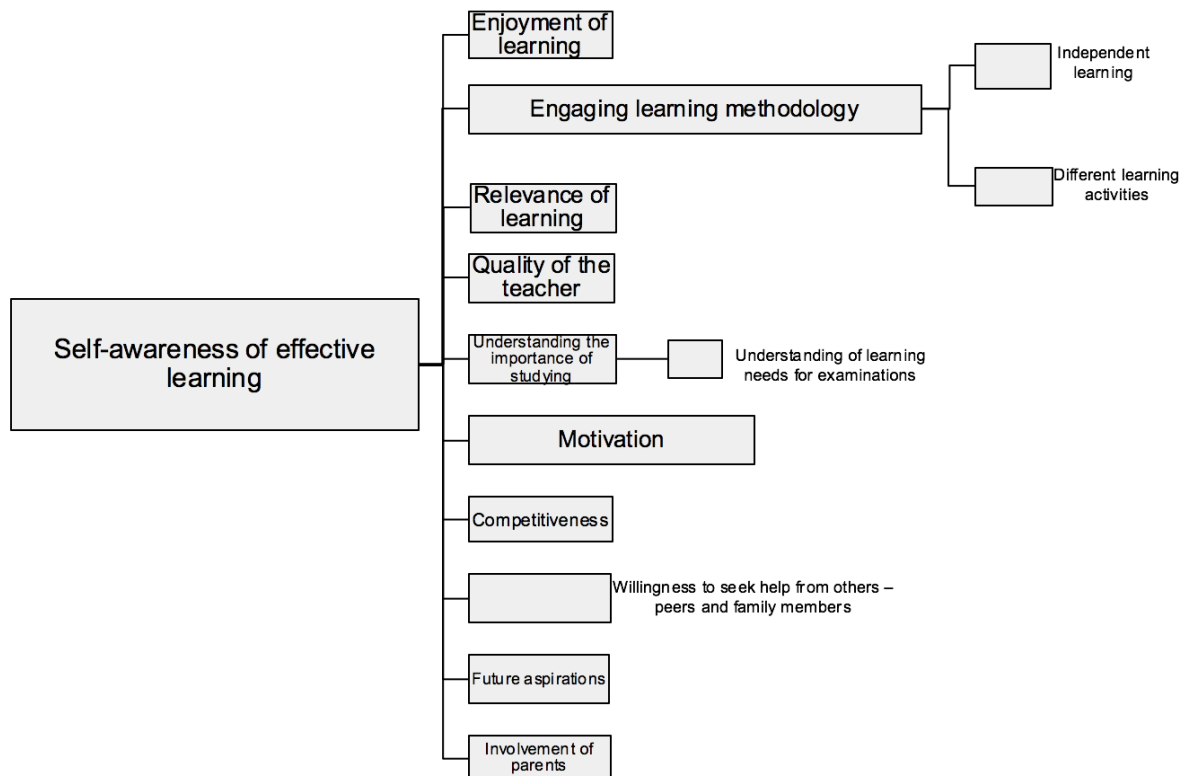
*“Concerning boys, I think there is a limit to how much difference the school can actually make because – I don’t want to say it is society – but it is expected of boys to be more rowdy and girls to be more studious. Even what they spend their time doing outside of school, it is expected that a girl will go home and study and a boy will go out and play football” (BB6).*

A view was expressed that pointed to teachers having different expectations of boys and girls.

*“...it is almost like the teacher expect the guys to muck around and the girls to work hard” (BB6).*

### Girls’ groups (School B)

**Fig 8.16 : Category: ‘Self-awareness of effective learning’ – girls’ focus groups (School B)**

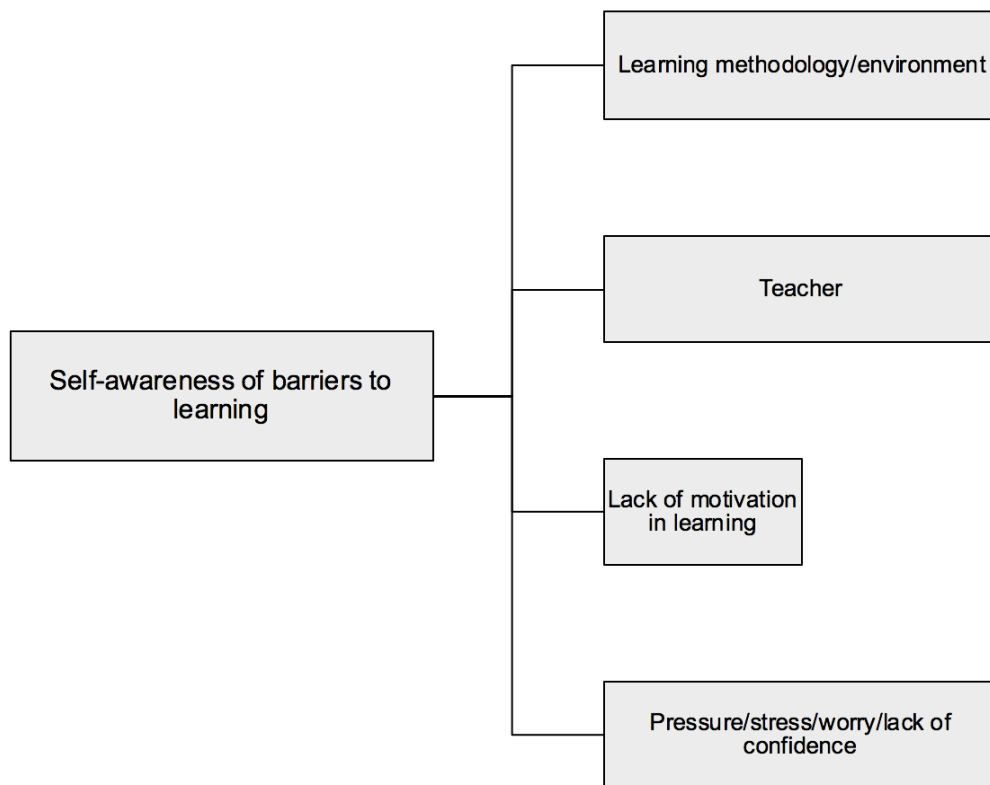


For the dominant concept ‘Engaging learning methodology’, group tasks to give the opportunity to think, learning by explaining to others, and having a chance to give opinions on their learning were points made by the S5 girls, with an emphasis on learning not just for an examination. The S6 group suggested no specific methodology: it was dependent on the individual to succeed. Girls being self-motivated was a theme, with girls helping each other to do well, motivating each other in class (GB5). The teacher who is interested in

pupils, praises and helps were all qualities which aided learning, with the gender of the teacher not considered important (GB6).

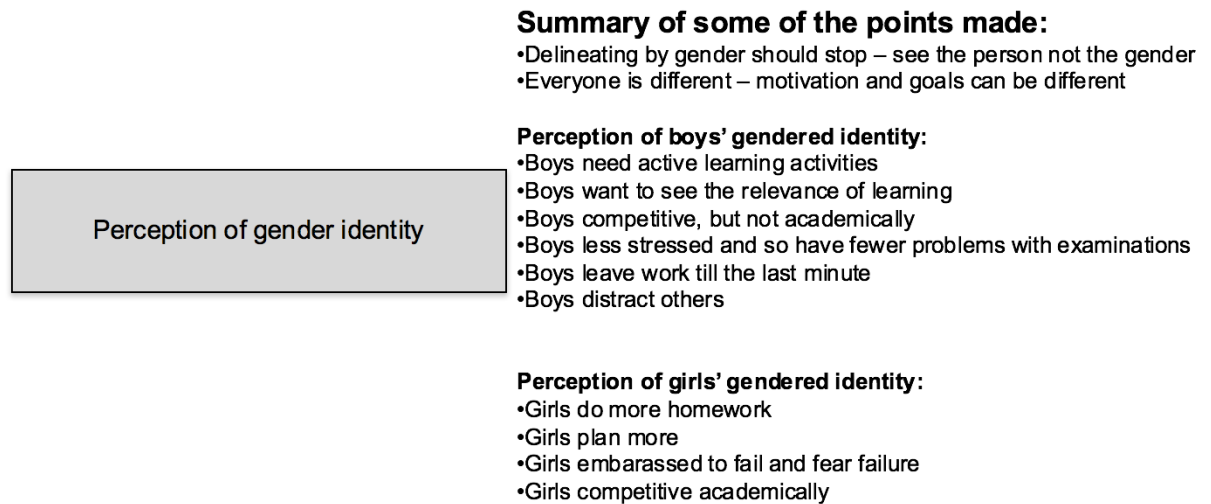
‘Competitiveness’ was cited. Being in a high achieving group, one group suggested that it was embarrassing to fail, more so for girls. Some girls saw peer pressure as positive by developing a positive attitude: being praised by peers, but this was not equated to being competitive, which they saw as “*pointless*” (GB5). The S6 group believed there was competition amongst girls, about learning and grades, more so than amongst boys (GB6). The groups suggested that parents wanted the best performance and were supportive.

**Fig 8.17 : Category: ‘Self-awareness of barriers to learning’ – girls’ focus groups (School B)**



Two points cited under ‘learning methodology’ were groupwork when others were not working, and copying from the board (GB5). It was suggested that teachers not knowing their pupils, or having too great a focus on grades rather than people, could be a barrier. ‘Pressure’, ‘stress’ and ‘worry’ were points made by both groups. They suggested that stress was caused by worrying about the future, grades, and the correct career path (GB6), as well as workload (GB5). Girls were also worried about failure (GB5).

**Fig 8.18 Category: ‘Perception of gender identity’ – girls’ focus groups (School B)**

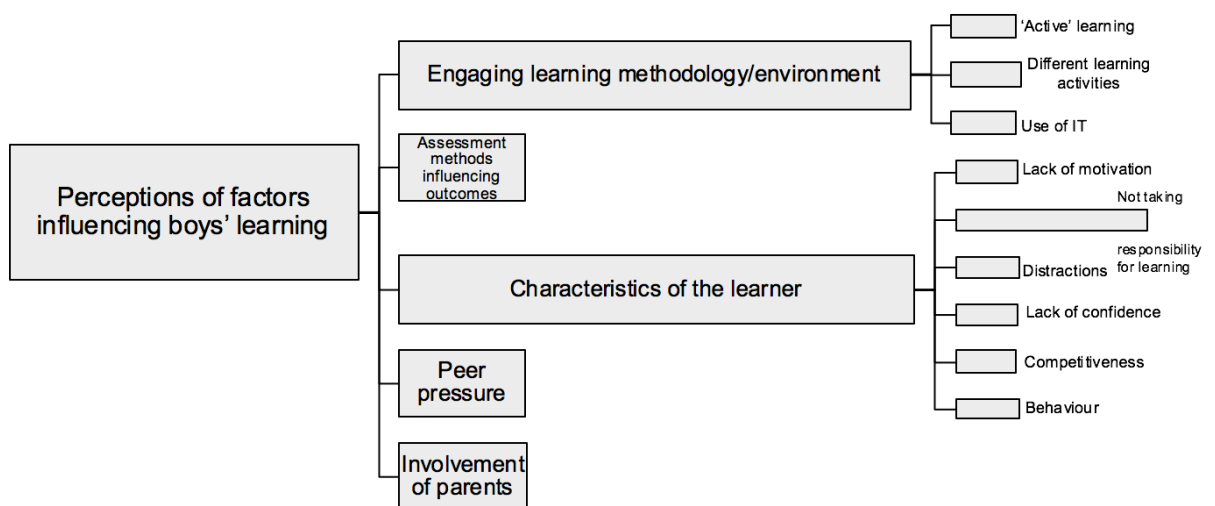


The summary of the points above, and other points from the interviews, suggest the general view that girls and boys are different, characterised by their behaviours and beliefs. Although one view in the S5 group was that that pupils should not been seen or categorised by their gender but as people.

*“...there needs to be a lack of saying. “Boys and girls.” There is a split right now and I think it should be a person” (GB5).*

### **Teachers (School B)**

**Fig 8.19: ‘Perceptions of factors influencing boys’ learning’ - teachers (School B)**



‘Learning methodology/environment’ and the ‘characteristics of the learner’ were given most attention by the teachers. The learning methodology that teachers believed boys

responded to best was practical work, short tasks, a variety of tasks in a lesson, competitive tasks, and using IT. They did not believe that groupwork was productive for boys unlike for girls. Girls were seen as being able to sustain longer tasks.

The ‘characteristics of the learner’ discussed by the teachers centred on boys not taking responsibility for their learning, with boys less likely to practise and less conscientious than girls. Boys were seen as easily distracted and disruptive. The teachers believed that boys were less confident in asking for help unlike girls.

‘Peer pressure’ was thought to be present but from the stance of pressure to be studious with particular mention made of girls having this type of peer pressure.

Parents were seen as supportive and were perceived as having to motivate their sons more.

### ***Conceptualising gender identity/learner identity***

The points made above show that the teachers observe or perceive there to be a difference between the way boys and girls approach learning and the types of methodology preferred by boys giving a sense of the gender of boys and girls being polarised into two categories.

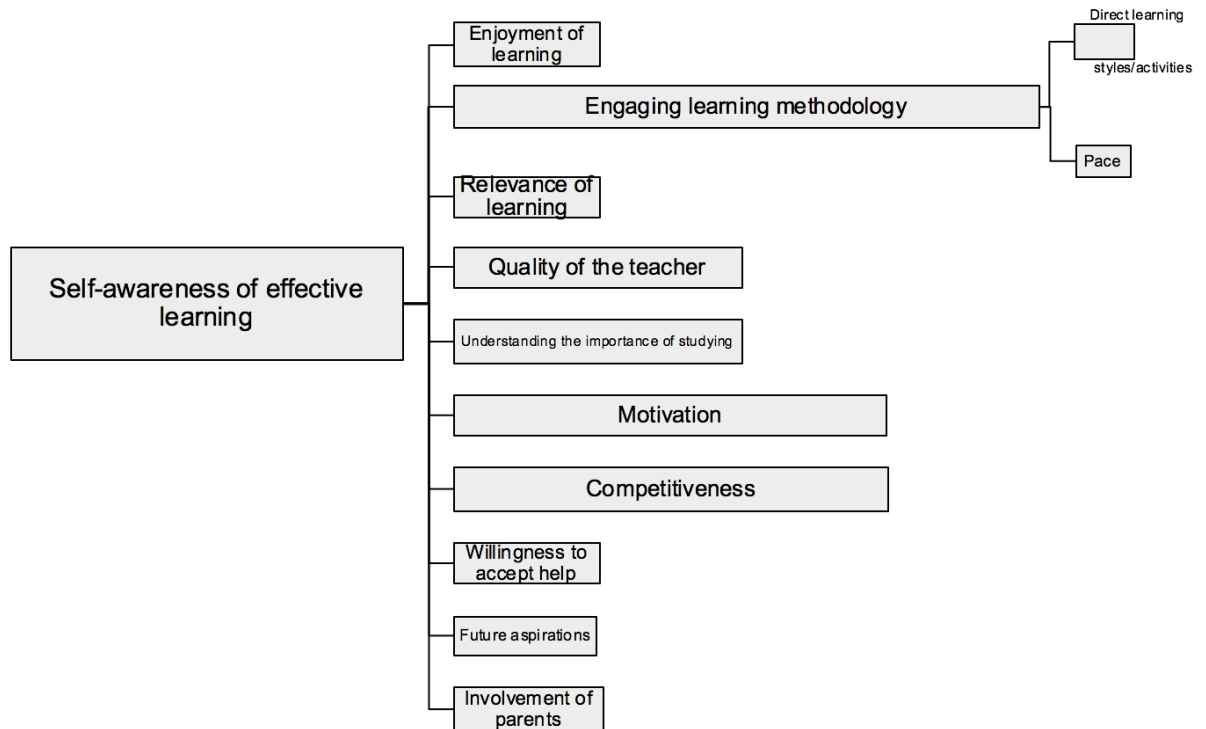
## **8.13 Triangulation of findings in School B**

Comparing the summaries of the findings from the three different groups, the views of participants showed general concordance. The analysis gave an understanding of the perceptions of boys’ learning in School B. The type of learning methodology favoured by boys was active learning but not working in groups, which the girls appeared to gain from. Boys appeared to be less confident about airing their views and asking for help. Boys were likely to be more distracted and exhibit disruptive behaviour as well as lacking motivation linked to enjoyment and interest. Girls appeared to be more self-motivated. The peer pressure that appeared to be present was to do well, particularly so amongst the girls. Parents were supportive. Boys, girls and teachers had views about gender and gendered characteristics that pointed to an essentialist stance. However, some expressed views in the boys’ and girls’ groups suggesting they believed that people should not be categorised by gender (GB5) and it was not all boys who did not study, suggesting that boys were not a homogeneous group (BB5).

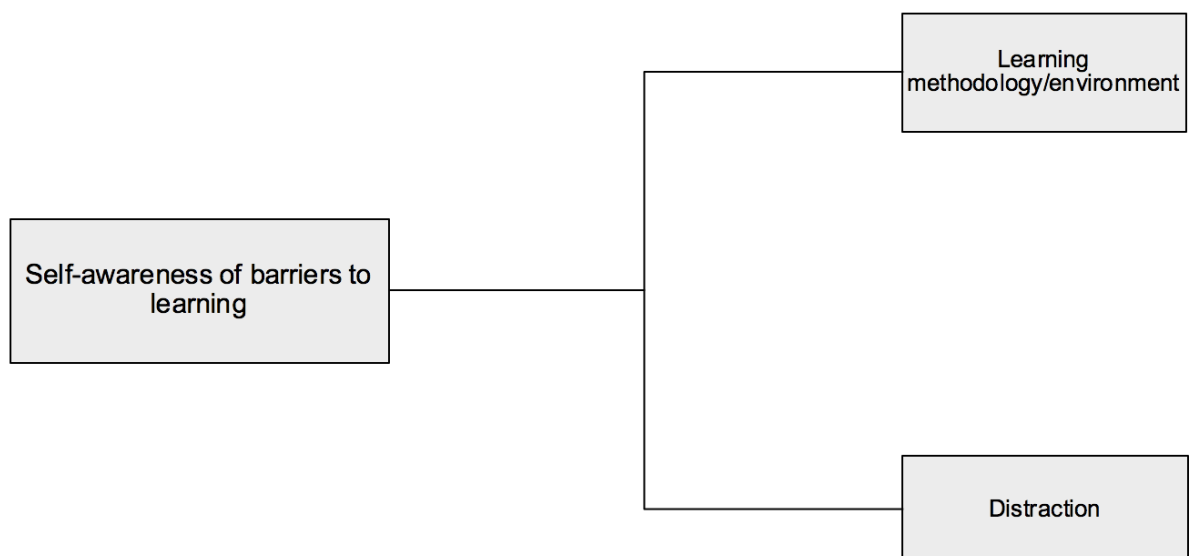
## 8.14 Presentation of analysis: School C – boys, girls and teachers

### *Boys' groups (School C)*

**Fig 8.20 : Category: 'Self-awareness of effective learning' – boys' focus groups (School C)**



**Fig 8.21 : Category: 'Self-awareness of barriers to learning' – boys' focus groups (School C)**



Points relating to the two maps above are discussed together because there was little reference to barriers to learning.

The points mentioned related to 'learning methodology' were the quality of the teacher:

providing activities that helped learning, for example groupwork, practical activities and ‘chunking’ learning with copying from the board cited as a barrier (BC6), and making the learning relevant and interesting (BC6); setting by ability in classes through different groupings (BC5); and using the supported study sessions offered by the school (BC5. BC6), although not all boys used this facility (BC5). The ‘quality of the teacher’ was seen as important (BC6). ‘Relevance’ was believed to make learning interesting but boys also said that they enjoyed learning for its own sake (BC5). There was one mention of some being distracted (BC6).

‘Motivation’ was prominent in the discussions with a strong sense of the individual having responsibility for their own learning with parents not required to urge their children to study (BC5). The point was made that this applied to most boys (BC5), with the reasons being personal drive rather than being driven by the school (BC5), interest, a future career (BC6), and parents’ expectations (BC6).

Peer pressure for the older year groups not to achieve was not felt to be present in the school, unlike the younger year groups (BC6). It was not embarrassing to succeed (BC5). A point was made that this sense of work ethic depended on the year group, with the view held that their own year group was a “good” year (BC5). ‘Competitiveness’ was emphasised, competition between boys in terms of academic results and the view was that this is beneficial because it

*“helps people strive to become better and I think that’s why particularly in boys it does seem to help learning significantly” (BC5).*

Boys were believed to reinforce competitiveness amongst each other, whereas the boys believed that this was less overt amongst girls (BC5).

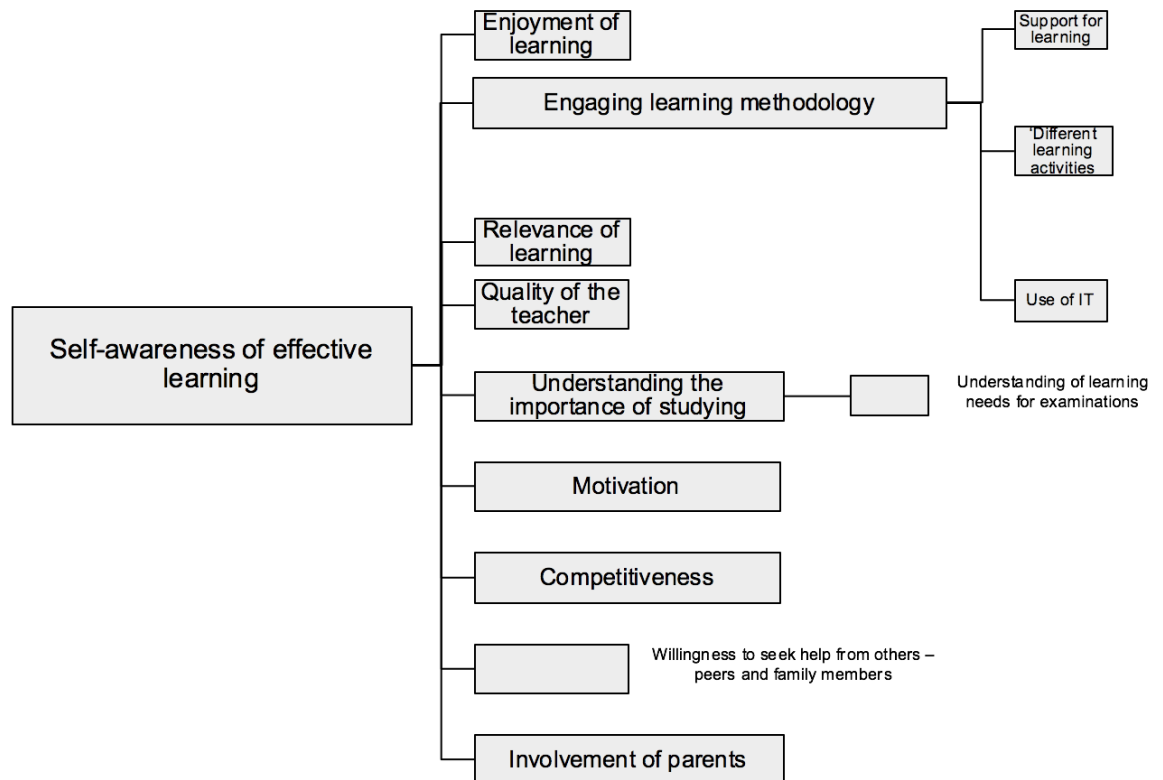
There was a ‘willingness to accept help’ from friends, providing a fresh perspective on learning (BC5). Parents were seen as supportive (BC6).

### ***Conceptualisation of gender***

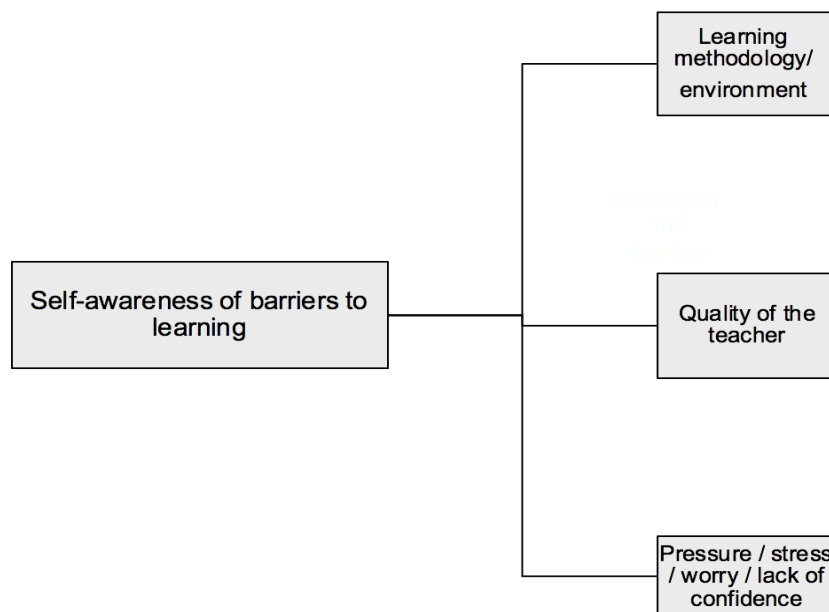
In the case of the boys there was not sufficient evidence to suggest a third category in relation to conceptualising gender identity. The only points made of any differences between boys and girls, perceived by the boys, were that girls appeared to spend more time on homework and studied more to improve grades. No mention was made of boys’ personal characteristics being different from those of girls other than girls being less overt about their competitiveness.

*Girls' groups (School C)*

**Fig 8.22 : Category: 'Self-awareness of effective learning' – girls' focus groups (School C)**



**Fig 8.23 : Category: 'Self-awareness of barriers to learning' – girls' focus groups (School C)**



As for the boys, points relating to the two maps for girls are discussed together because there was little reference to barriers to learning.

The views expressed about 'learning methodology' focused on the help the school gave

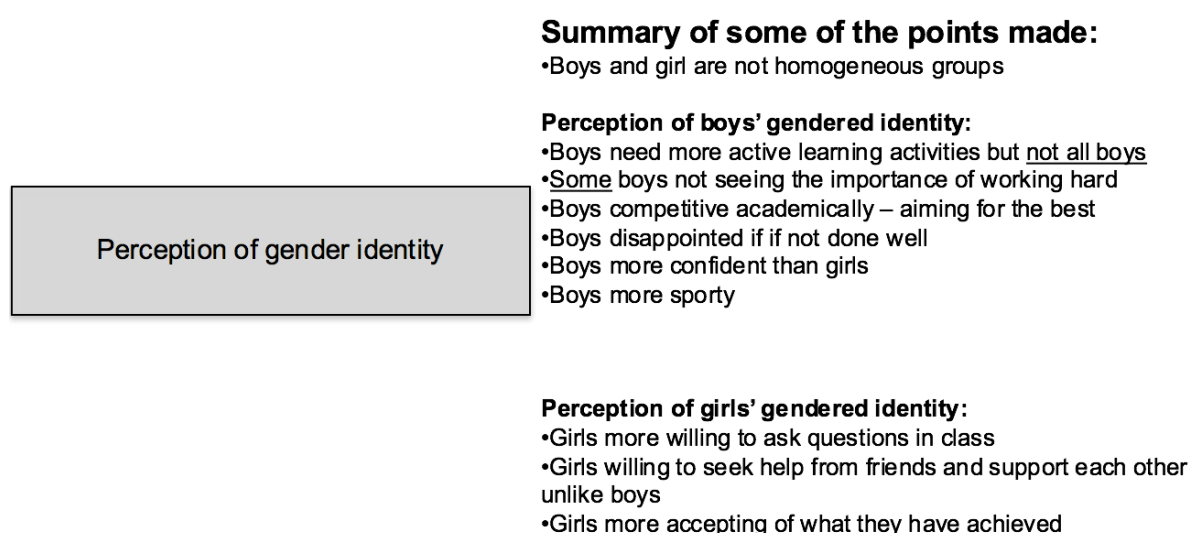


with learning (GC5, GC6). Different learning activities and interaction with the teacher were also cited, with the ‘quality of the teacher’ seen as important for learning; particularly the relationship with the teacher (GC6), and poor teachers could be a barrier (GC6). Copying from the board was given as a barrier to learning (GC6). Girls helped and supported each other (GC5). Parents were seen as supportive (GC5, GC6).

The points about ‘motivation’ were that interest in a subject was important (GC6). ‘Understanding the importance of studying’ came through strongly, with achievement being due to the work of the individual (GC5) and their need to succeed (GC6). The girls said there was ‘competitiveness’ in the school rather than peer pressure and (GC6) and they were driven to be competitive (GC5), wanting to do better than others (GC6). ‘Lack of confidence’ was raised as being a barrier to learning (GC5).

### *Conceptualisation of gender*

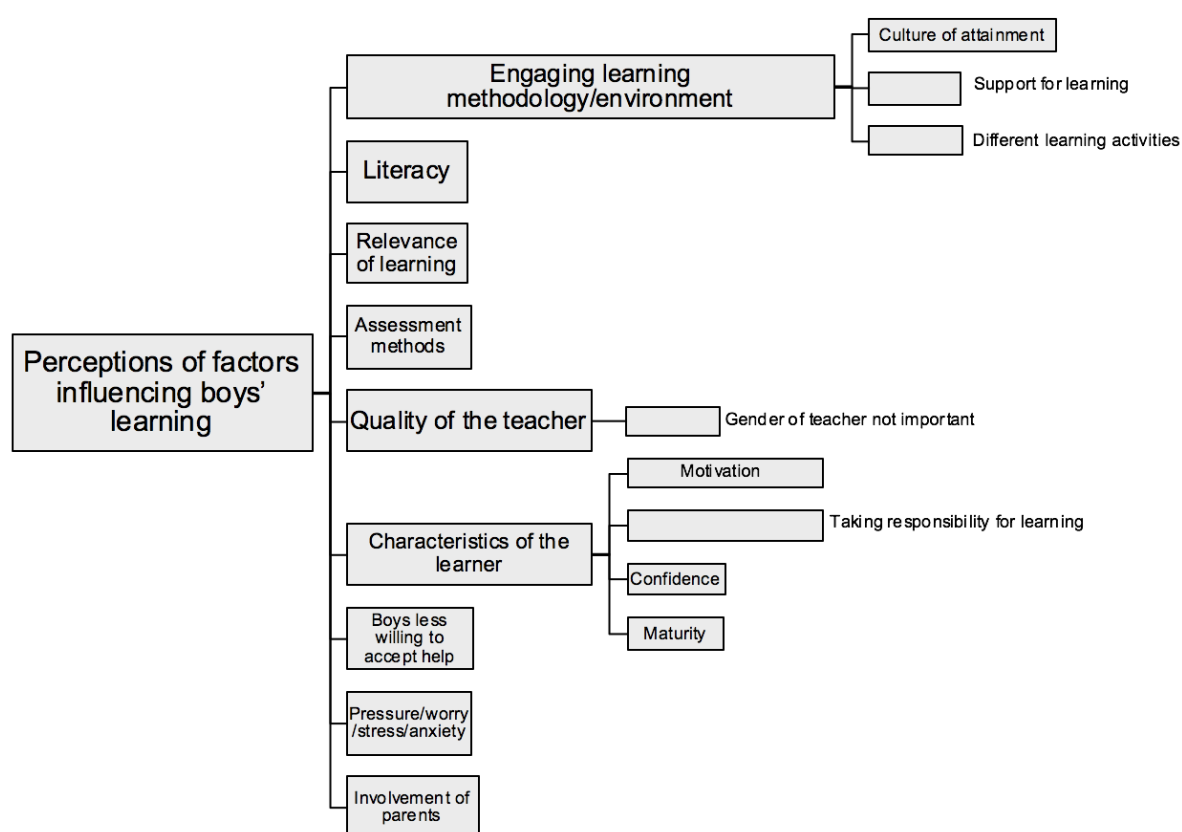
**Fig 8.24: Category: ‘Perception of gender identity’ – girls’ focus groups (School C)**



The list given in Fig 8.24 gives the points made by the girls indicated some perception of differences by gender but characteristics that would aid learning, for example perceiving boys to be more competitive and confident, with girls seeing themselves as being more willing to seek help from others. There was not a sense of seeing boys and girls as homogeneous groups but as individual learners.

## Teachers (School C)

**Fig 8.25: Perceptions of factors influencing boys' learning - teachers (School C)**



'Learning methodology/environment' had prominence with *Curriculum for Excellence* cited as a possible reason for boys' improvement in learning because of the increased opportunities for staff to be creative, with more skills based learning and active learning, personalisation and choice, and different types of assessments available.

Excellent support from the school was discussed from the perspective of extra help. There was a strong tracking and monitoring system for boys, which was proactive. The school was cited as having opportunities and high expectations to promote a culture in the school that valued academic achievement: one where it was "*good to be really smart and get top grades. It is not the geeky thing to do*". It was also suggested that the culture of the school put pressure on the pupils to do well. This had led to some pupils not believing that they could do well, and then requiring support. Parents were cited as having high expectations.

The 'quality of the teacher' was a prominent point, with teachers promoting a positive and "*can do*" attitude and support, with pupils having confidence in the teacher,

*"It is that positive attitude. It is pupils walking into your class and they know that you know that they can do it and you are going to support them in achieving"*.

The gender of the teacher was not considered important and there appeared to be no gender bias on the part of the teachers: a 'can do' attitude attracting the same support.

In terms of the ‘characteristics of the learner’ it was inferred that boys took ‘responsibility for their learning’, boys “*definitely just keep their head down*”. Boys were perceived to be more confident and not asking for help unlike the able girls. Girls were seen as worrying about their progress, unlike boys.

The coding was examined for conceptualisation of gender. In School C there was no sense of an essentialist view of gender, unlike in Schools A and B. The identity was more about pupils as learners rather than as boys or girls.

### **8.15 Triangulation of findings in School C**

Triangulation revealed that there was a very positive view given of the school and what it aimed to achieve for all pupils. Little in the way was offered of barriers to learning. The teacher was highlighted as being an important factor in promoting effective learning. The focus was very much on effective strategies for learning. A range of learning activities was offered which supported boys and girls. Support was offered by the school, which was helpful for both, with the school having a strong culture of achievement. A view from teachers was that this high achievement culture appeared to put pressure on some. Both boys and girls were motivated to do well and take responsibility for their learning and achievement. Peer pressure in the school was to be ‘smart’. Competitiveness to achieve academically was cited by all as being present in both boys and girls with boys and girls feeling that boys were more competitive academically. Girls were cited as being less confident and more likely to ask for help. All agreed that parents were supportive. None of the boys, girls or teachers gave a sense that boys and girls behaved differently as learners nor was there a sense of gender stereotyping.

### **8.16 Comparison of findings from all three schools**

In seeking to assess if the findings from School A, and notably academically able boys’ perceptions of their learning, were exclusive to that context or were similar to other schools with similar demographics. the summaries of findings of all three schools were compared.

What was apparent in all schools was that pupils who were academically able, including the boys, understood what was required of them to achieve highly both from the perspective of the school provision and also their own personal characteristics as a learner.

The boys all gave similar views of learning methodology and environments that were conducive to effective learning, with engaging and relevant learning as well as the quality of the teacher being highlighted by all. In Schools A and B there was discussion about barriers to learning whereas in School C the focus was much more on effective strategies with little reference to barriers. The gender of the teacher was not seen as important in any of the schools. Parents were seen as supportive in all schools and provided support to their child. There was no sense that these boys were disaffected. They all enjoyed learning, and motivation was a key factor. Lack of motivation was more of a factor in Schools A and B and appeared to be a barrier to learning. This did not appear as be the case in School C where there was more of a sense of boys taking responsibility for their own learning and achievement. Both girls and teachers in School C cited boys as being more confident than girls. This was not evident in Schools A and B.

In School A boys were cited as not being academically competitive whereas girls were, which was similar to School B. By contrast, in School C there was a strong sense of competitiveness amongst boys and girls to achieve academically, boys cited as being more so. In all three schools there was no evidence of peer pressure to eschew being academic. In School C peer pressure was to be 'smart'.

In Schools A and B, the most interesting finding was the essentialist view of gender, with boys and girls perceiving themselves as different, and this appeared to be how teachers and parents perceived boys and girls. This finding was tempered by some voicing that boys were not a homogeneous group, but there was an overwhelming sense of duality of gender rather than multiple gender identities. However, this stance was only found in Schools A and B and not in School C. In School C there was no sense of boys and girls expressing any view of themselves along gender stereotypical lines, or teachers viewing them in this way. At the time of this study, in Schools A and B, there was a gendered pattern of attainment whereas in School C there was no significant difference in attainment by gender: girls and boys achieved equally well. Again it must be stressed here that the case studies in Schools B and C were much smaller, with fewer participants and so the findings from these schools could only be tentative. Nevertheless, it has allowed some conclusions to be drawn, regarding potential transferability of the theoretical framework, and future direction for further study, discussed in chapter 10. The next chapter discusses the analysis of the findings from all three schools, drawing from academic literature.

## **Chapter 9: Discussion of the analysis of the findings from all three schools**

### **9.1 Chapter overview**

This chapter discusses the summary findings from all three schools, with a focus on boys' views, and explores explanations for these findings drawing on research literature, in response to the research questions posed in Chapter 2 and highlighted at the beginning of Chapter 8. This critical appraisal of the results of the analysis draws specifically from literature on factors to explain the underachievement of boys, and where possible academically able advantaged boys, the subject of this thesis, and the literature exploring gender construction. The chapter concludes with some broad conclusions, with the grounded theory being discussed and presented.

### **9.2 Boys' perceptions of their learning (in School A)**

In discussing the results of the data analysis I have drawn from the analysis of both the individual boys' interviews and the boys' focus groups and consider this along with the literature, and some of the views expressed by the others interviewed.

The summary of the codes for both the individual boys' interviews and the boys' focus groups were presented as conceptual maps in Chapter 8. Although there was more information to draw from in the case of the individual boys because of the larger sample size (eighteen interviews), whereas there were only three boys' focus groups, the findings have been taken together as they draw from the same groups of boys. There were marked similarities in the findings and in the concepts that emerged. What was less overt in the focus groups were the illustrations and detail that qualified the concepts, having less data to draw on. The three broad categories were the same. Where there were any differences, these are discussed.

What became clear from the interviews was that the boys were aware of what was required of them to become effective and successful learners. Their perceptions were nuanced. They gave strong views of what they considered important, not only learning methodology that engaged them but also the type of learning experiences that they preferred to engage in. They understood themselves as learners: they had a sense of self and gave opinions that appeared to me, as an objective researcher, to be authentic and genuine and based on their own experiences. This assumption was based on my perceptions as someone who has had

many years' experience of interviewing pupils, and also on the evidence gathered from the systematic process of the grounded theory approach. The boys participated willingly in the interviews and gave fulsome accounts of their lived experiences. There appeared to be no lack of confidence in expressing their views. There was consistency between the views expressed by the individual boys, and general agreement amongst the boys' focus groups interviewed.

The boys were clear about what hindered their learning, both extrinsic and intrinsic factors: both due to the learning environment and to those linked to their own personal traits. There were some personal characteristics that were reinforced throughout the interviews (including those interviews in the other schools), with lack of motivation being the one that had most prominence.

What was surprising from the evidence gathered was how almost all voiced polarised gendered views of themselves as a learner or gave their perceptions of boys in general in terms of a gender identity that impacted on learning. This appeared to temper and qualify their perceptions of their own identity as a learner. This result of this essentialist stance by gender that emerged from the interviews was a surprise to me as Head Teacher because of the ethos and climate that I strove to develop during my tenure.

The broad concepts and categories arising from the data are now considered in the light of the academic literature in response to the research questions, focusing on the perceptions of academically able advantaged boys of their learning, what they believe helps and hinders their learning, and through the boys' views of themselves as learners, what part gender and gender construction plays in influencing an academically able advantaged boy's learner identity. This last point is important in light of the findings presented in the previous chapter.

It is important to stress that although some of the concepts are discussed in isolation that is not to suggest that they are mutually exclusive.

### **9.2.1 Self-awareness of effective learning and the barriers to effective learning**

In this section the focus is on the boys' views of their learning and their own characteristics as learners but not from a gendered stance. The perceptions of gender identity are discussed in section 9.2.2. Rather than considering each of the concepts as

separate entities, linkage has been made between the concepts to give coherence to the discussion, and this links with the emergent theoretical framework mooted in section 8.6. The tentative theoretical framework proposed, focused on boys' 'self-realisation' of learning rather than on facilitating and hindering factors.

The concepts have been divided into two broad categories: *extrinsic* – those concepts that allude to features of learning that boys rely on others to provide, and *intrinsic* – those concepts that are traits or characteristics of boys that are intrinsic to the boys themselves.

*Extrinsic: Engaging learning experience and the barriers.*

**Involvement of parents**

*Intrinsic: Personal characteristics assigned by the boys for effective and successful learning, and those creating barriers to learning*

These mirror the stance that was taken in the literature review in Chapter 3 when influences on boys were explored from the perspective of pedagogical practices impacting on boys in the classroom including the relational impact of others: peers and teachers; and identity.

### **9.2.1.1 The learning experience**

This includes the concepts of learning methodology/environment and the concepts that were reassigned as properties of the concept, for example, groupwork and learning styles; relevance of learning; the influence of the teacher as well as assessment methods. Short sections on literacy and single sex groupings have been added following this section because of the high attention given to these areas by researchers, particularly in relation to boys, even though these areas did not feature prominently in the interviews with the boys.

***Engaging learning methodology/environment and the barriers***

The boys gave nuanced views about learning that engaged them. The boys expressed that they enjoyed variety in learning methods (B14) including active learning (B4, BA5); and valued learning in groups (B9, B17), where they were able to access others' ideas and ask others in the group for help (B9), and believing helping peers improved their own learning (B10); as well as learning independently (B7). Other factors mentioned were the type of environment, with the environment of learning having an impact on engagement (B14);

and enjoying a relaxed learning climate (B9, B6).

Boys were also able to express what hindered their learning and, in the context of engaging learning methodology, cited that copying from the board or working from a textbook were hindering factors (almost half of the boys), with one boy mentioning “*being fed just purely to get marks*” (B5). Others cited that working in groups was not always conducive to learning (B17, B18), including single sex groups (B17).

The ideas and concepts arising from the views of boys point to effective learning and teaching that would serve both boys and girls, which was confirmed by the views expressed by the girls. In critiquing these points, it is noteworthy that some researchers, notably Myhill (2002) believe that the focus should be on effective pedagogical approaches that are not designed with gender in mind. Some of the key studies examined in Chapter 5 made this point (Younger and Warrington, 2005; Estyn, 2008). Some researchers suggested improved learning and teaching but took a polarised view of boys and girls (Ofsted, 2003; Department of Education Employment and Workplace Relations, 2008), whilst others emphasised the need to match learning and teaching to meet needs (Tinklin *et al.*, 2001; Skelton *et al.*, 2007).

### ***Relevance in learning***

Although this could be subsumed within the section above, this has been singled out for discussion because of the high prominence that this was given as being an influence on learning success and future career aspirations. Learning was facilitated by relevance, both from the perspective of enjoyment and also understanding, but the main point made was seeing the link of relevance in learning to future aspirations (at least half of the boys).

*“More enjoyable to learn and skills you are going to use. Because it is relevant and it is (related) to what I want to do” (B11).*

Relevance in learning linked to gender is an area where there appears to be little research. Wigfield *et al.* (1998: 78) link relevance in engaging with a task to “attainment value”<sup>33</sup>, that is if tasks will meet a person’s “self-schema”<sup>34</sup> then it will have higher attainment value and will be considered relevant. Relevance is also linked to future careers (Wigfield

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<sup>33</sup> Attainment value: The personal importance of doing well on a task (Eccles *et al.*, 1983, cited in Wigfield *et al.*, 1998).

<sup>34</sup> Self-schema: “the knowledge individuals possess of themselves (Pintrich and Schunk, 1996) ... encompassing all aspects of one’s existence including cultural, physical, social, cultural and academic” (Alexander, 1997: 86).



*et al.*, 1998). As such those tasks that are identified as meeting future aspirations will be relevant to the learner. All of the boys' groups and almost half of the individual boys made this point. It is interesting to note that where a task is not enjoyable, but it is known to be important for future aspirations, then the boys would still engage with the task (BA5, BA6).

The concept of assigning value is also linked to motivation (Eccles *et al.*, 1983), which is discussed in more detail in section 9.2.1.3.

### ***Influence of the teacher***

The quality of the teacher was a unanimous view, improving motivation (BA4) and determination to do well (BA5). The boys also placed value on positive relationships with the teacher. There was a strong sense of teachers making the difference and particularly those teachers who appear passionate about learning (BA5) by providing environments conducive to learning, teachers being enthusiastic (BA5) and motivational (Younger and Warrington, 1999), and providing effective feedback and steps for improvement. *"If you have a teacher you get on with more likely to learn a lot more from them"* (B7). The quality of the teacher is an aspect that was highlighted in the literature review of the case studies examined and was forefronted by Sukhnandan (1999 and 2000), the Australian *Success for Boys* project and Skelton *et al.* (2007) where there was an emphasis on teacher/pupil relationships.

In contrast, there were strong views expressed about teachers who were not interested in the whole person and who did not deal well with disruptive pupils. Not having a teacher who could be approached for help was also inhibiting.

*"Not having a teacher that I can connect with, being able to talk to them without talking about school work"* (B9).

*"For some people the teachers need to be a bit more strict - some people just try to do what they want and some teachers do not deal with this as much as others. Has an impact on how well they do and on the rest of the class"* (B17).

*"Don't understand it and the majority of the class do understand it and you are too worried to say that you don't understand it"* (B3).

Only one boy felt he connected better with male teachers (B3), plus another who suggested that the gender of a teacher could make a difference (B18), but in the main the boys expressed a view that the gender of the teacher was not important. What was surprising was the view of four boys about teachers having a gender bias. However, there was a

counter argument by more boys that boys and girls are treated the same.

There was a sense that teachers are more lenient when dealing with girls (B17, B18) but also differing views about teachers giving more or less help to boys, even when not sought.

*“Teachers don’t help girls more than boys but there is a general perception that boys have, that they [the teachers] do help them [girls] more” (B9).*

*“They [teachers] ask people who do not necessarily need it. They expect girls to be doing it on their own but they expect boys to need extra help. Some teachers expect to give boys more help even if they do not need it” (B17).*

Boys demanding more from the teacher was not raised by boys, which may have been because of the subset of boys interviewed. However, there was a comment made by a teacher,

*“Boys get more attention than the girls. They ask for it either through behaviour or questioning. Boys question a lot more than girls. Boys come in and demand attention as soon as they have walked in the room more than girls. In that way maybe we are harder on them because they are annoying us, because they are demanding too much attention and they just need to sit down and be more like the girls, who are coming in quietly and getting their stuff out and getting started” (T2).*

This is an area that has attracted interest within the research field. Some academic studies state that teachers gave more support to the learning of boys: responding to their greater number of questions, greater interaction and feedback given to boys than was given to girls (Hutchison, 2004). (Hutchison’s review was pertaining to the high ability groupings.) Some argue that boys can have advantages over girls because of their greater demand of teacher time (Weiner *et al.* 1997; Francis 1999b; Gray and Leith 2004), although these studies did not have a specific focus on the secondary age academically able group as in this study. The perception based on the evidence collected in the case studies did not suggest this attention seeking was an issue amongst the boys.

Other researchers prominent in the Scottish research field, Priestley (2005) and Forde *et al.* (2008), discuss the key role that teachers play in the development of an effective curriculum and pedagogy that are adaptive and meet the needs of all learners. Priestley (2005: 32), in his discussion of curriculum development, makes the point that teachers tend to “filter change through their own values” which could be influenced by factors such as gender. Skelton *et al.* (2007) stressed the need for teachers to be aware of gender stereotypical responses.

Another aspect is the interaction between the teacher and the social classroom

environment. A socio-cultural view is that learning takes place within this social and cultural environment and so this environment cannot be isolated from learning (Rogoff, 2003; Murphy and Iverson, 2004; Elwood, 2006). Learning depends on the teacher relationship and this can be applied for example to how teachers assess learning. “Meaning, knowledge and understanding reside within communities and can be understood only within this cultural context” (Elwood, 2006: 273). In an example cited by Elwood from an English classroom experience, teachers have a view of a ‘good’ piece of writing and the style considered to give success. This influences a pupil’s sense of how they can or cannot meet expectations set by the teacher. Success is intertwined with teachers and students. Learning assessed in this cultural context, where the link between individuals and gender is fluid, is dependent on the teacher relationship and expectations, and if the view of gender is fixed this could be influential in the learning of boys and girls.

The perception of the view of the gender of the teacher not being important, found through the analysis, is contested in the literature. Tinklin *et al.* (2001: 110) suggest that there could be a case for boys having male role models. In contrast, Riddell and Tett (2006) argue the sex of the teacher is not the determining factor, it is how different gender identities are demonstrated, and this could be exemplified by either men or women. Riddell and Tett (2006) argue that having more male teachers is not regarded as a solution for boys. There is no validated research evidence to show that the sex of the teacher being the same as the pupil has a positive impact on attainment or behaviour (Hutchings, 2002). Martino (2006) goes further and suggests that by having male teachers to provide male role models, there is a danger of perpetuating hegemonic masculinity. Skelton *et al.* (2007) and Francis *et al.* (2008) cite only pupils’ constructions of gender identities as having any validity based on evidence. The gender of a teacher is less important than the teacher engaging young people in high quality learning experiences that are relevant to their wider lives (Forde *et al.*, 2008). This point about the learning experiences being more important than the gender is echoed by some of the boys (BA5).

### ***Assessment methods***

Assessment did not have prominence. The type of assessments was mentioned as being a factor (B11), suggesting that continuous assessment would be preferable to a one off examination (B11, BA5) but this was not a strong point. There was a sense of acceptance about assessments particularly from the perspective of external examinations. Experiencing difficulty and “*panic*” (B4) in the examination setting were raised, and also the sense of being “*intelligent*” not necessarily translating into good examination

performance (B12). One suggestion for the lack of profile given by the pupils to assessments could be that they have known only to expect an assessment instrument that relies on a formal written paper at the end of the session, and their parents, being highly aspirational for their children, could also see this as the means of gaining success and hence an opportunity to move on to a future career that is in line with these aspirations.

Tinklin *et al.* (2001) found some evidence of boys and girls approaching assessment tasks differently and that there was a gender difference to the type of assessment instrument. Elwood (2006), in her review of literature, suggest there is limited research on the social impact of assessment policy and practice or of the articulation of the learning to the assessment instrument. Elwood goes on to suggest that, from a social constructivist stance, all testing is seen as “socially constructed, value-laden and highly problematic” (Elwood, 2006: 269). The assessments themselves have an impact on attainment and achievement (Murphy and Elwood, 1998; Elwood, 2001; Elwood, 2006). Therefore, the differences in performance by gender need to be examined in the context of the assessment instruments to begin to understand the responses. The assessment instruments: multiple choice tests, portfolios, and the style of the examination all have an impact on response and performance (Stobart, 1992, Elwood 2005). There is no definite evidence from the analysis of these boys’ views in this study in School A that the type of assessment is a significant factor in boys’ underachievement.

### ***Literacy***

Comments related to literacy were only made by about 25% of the boys with the key points being that they found English challenging (B10), did not understand English (B12) and were neither motivated (B11) nor enjoying the subject (B13). There were comments about English being important and valuing the subject (B3, B6, B9, BA5). Teachers and parents both raised literacy as a potential barrier, notably in writing.

Literacy has been included for discussion because it is an area of the curriculum that continues to draw attention and concern in respect of boys’ attainment, with boys not performing as well as girls (Cohen, 1998; Swann, 1998; Epstein, 1998; Guzzetti *et al.*, 2002; Forde *et al.*, 2006; Forde *et al.*, 2008). However, it must also be acknowledged that it is not all boys, and some girls do not perform as well as boys (Tinklin *et al.* 2001; Croxford *et al.*, 2003; Younger and Warrington, 2005). Tinklin (2003) and Croxford *et al.* (2003) highlight that the picture is complex with an intersection of factors other than gender, class being one. In this group of advantaged boys, the issue of literacy was not

dominant. One boy (B12) suggested that “*girls are better at English.*” (Examining the Higher English statistics (2012) for S5 in School A did not reveal a poorer performance, based on the average grade achieved by boys and girls, but what was revealing were the smaller number of boys presented for Higher English: 43 boys compared to 74 girls. This fewer number of boys presented was a pattern for the years examined: 2008 to 2012).

### ***Single sex groupings***

Single sex grouping was a factor that was mentioned by one boy (B17) as being positive and beneficial, which was supported by two teachers who had tried out single sex groupings<sup>35</sup>, one as part of the intervention tried out in the school, discussed in Chapter 1. However, this boy also suggested that there was less work done in single sex groups. One girls’ group advocated single sex (girls’) classes (G4) to allow girls to be able to be more focused, to be less stressful for the teacher, but suggested that an all boys’ class would not be desirable because it would be disrupted by the boys. How girls and boys are grouped is a contested area and there appears to be little research to show sustainable positive impact for boys and girls in these types of settings. It appears that the impact of single sex classes on achievement varied with the study undertaken. Some researchers, for example, Sukhnandan (2000) found that there could be a benefit for boys, believing that different learning styles, different teaching styles and curricular resources could be targeted appropriately, as well as addressing attitudes towards learning. Warrington and Younger (2003) suggested that both boys and girls could benefit, although they found no clear rationale for single sex groupings. Warrington and Younger (2001) in one study found the impact also depended on how the girls and boys were set: whether they were in a ‘top’ set or a ‘bottom’ set. There was the view that there were higher expectations of teachers on the ‘top’ set boys, suggesting that able boys would gain from the experience, unlike ‘bottom’ set boys. Guzzetti *et al.* (2002) found single sex groupings, where there was a ‘talk’ element, improved engagement of girls, which was alluded to by one teacher (T2); whereas others, for example, Jackson (2002b) did not find this type of grouping beneficial: behaviour in all-boys classes could be difficult to manage but in this case the cohort of boys was not defined by different ability or advantage groupings. In Scotland, there have been some studies. Condie *et al* (2006) studied a small number of schools over a limited time frame. The study looked at different age groups and in different subject areas. There was no conclusive evidence to support the strategy. The study did show that the impact of the teacher on learning and teaching had more bearing than grouping pupils by gender.

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<sup>35</sup> Single sex groupings in this context were groups of single sex groups within the same class setting

Pupils themselves were mixed in their views about gendered groupings. Airnes (2001, cited in Forde *et al.*, 2008) found differing views amongst girls and boys: girls preferred a girls-only class whereas boys had no strong view. The research reviewed emphasised the importance of monitoring to measure impact, but because of the short life of the projects under investigation there was no robust evidence to indicate that class groupings did have a sustainable effect on achievement. This lack of impact on gendered patterns of attainment was one of the points raised from the review of the key studies (Chapter 5).

Francis and Skelton (2001) raise concerns about reinforcing gender stereotypes by segregating into gender groups, taking no account of differences within each gendered group. Sukhnandan *et al* (2000) did acknowledge in their study the potential dangers with single sex groupings: perpetuating gender stereotyping, both through gender resource material, for example 'male' friendly texts. They also acknowledged that focussing on boys could be detrimental to girls by not meeting their needs.

Although single sex classes were advocated by one boy who appeared to have benefitted from the experience, which was confirmed by T4 who was the teacher, this may have been due to the high quality teaching that they received at the time, which accords with the view of Condie *et al.* (2006). T2 also tried out single sex groupings in her class, which she discussed in her interview. Again this was a particular strategy that was well planned and had a positive outcome and was time limited, and again this was delivered by a teacher who delivered high quality teaching.

#### **9.2.1.2 Involvement of parents**

This was not an area that drew much attention but those views expressed were positive with boys saying that parents were supportive (B4), and they would seek their parents' help if needed (B17, B18, BA4). This was reinforced by teachers and parents.

There were mixed views about whether boys and girls are treated the same way by their parents, with one group (BA5) suggesting they were, and another suggesting that parents have different attitudes towards boys and girls (BA6), although this point was not raised by any of the individual boys. Engagement of parents in a child's learning is an area that has attracted considerable research and the outcomes of this research are clear that parents do have an impact on a child's learning (Harris and Goodall, 2007; Gems Education, 2010; Goodall and Vorhaus, 2011; Aston and Grayson, 2013).

### 9.2.1.3 Personal characteristics of boys from their perspective

The analysis revealed some of the characteristics that can impact on learning that are in accord with the literature. What was apparent was a clear understanding amongst the boys of the importance of work ethic: working in school, studying for examinations and the importance of motivation or the lack of motivation. The lack of motivation was a strong element. They also expressed that they would look for help if they needed it: from peers, teachers and parents. There was little reference to competition and no individual boy spoke about academic competitiveness. Girls echoed this view suggesting that they were competitive academically but boys were competitive in sport. However, Powney (1996) suggests that there is low correlation between attitudes and attainment.

#### ***Motivation***

The responses linked to motivation were almost all focused on lack of motivation. Lack of motivation for revising for examinations (B8, B9); with working being a chore (B6); not being interested or enjoying a topic reduced motivation (B16) were some of the points raised.

Meece *et al.* (2009) acknowledge the role that motivation can have in understanding gendered patterns of achievement and attainment, and their literature review, exploring motivation of learners, points to one theoretical framework, introduced by Eccles *et al.* (1983) (Meece *et al.*, 2009: 414), that could be pertinent in this study, that of “expectancy-value beliefs” and “competency beliefs”. This theoretical framework focused on identity development as well as a socialisation element where other aspects of a learner’s life: the culture, parents and teachers, could have an influence on the learner’s “achievement-related beliefs”. The principles of this paradigm are that the ‘competency belief’ which is an “estimate of one’s ability to succeed in an activity” (Eccles *et al.*, 1983, cited in Meece *et al.*, 2009: 414) is influenced and moderated by the ‘value belief’ which is the value placed on an activity. This value is considered in terms of

- (a) the perceived importance of being good at an activity; (b) perceived usefulness of the activity for obtaining short- or long-term goals; (c) perceived interest or liking of the activity; and (d) perceived cost of engaging in the activity (e.g. time taken away from other activities, amount of effort needed to succeed, performance anxiety associated with the activity etc.)

(Meece *et al.*, 2009: 415).

Meece *et al.* suggest that the value placed on an activity is subject to gender differences, and that gender, influencing a pupil’s belief in their competency and the value placed by

the learner on educational activities, could have an impact on their attainment (p. 416). Considering the terms of 'value' proposed by Meece *et al.* could be considered to have an impact on the subset of boys. 'Value' in terms of usefulness and goal-setting, interest in a subject were points raised by the boys. What did appear to limit some of their successes was the effort required to reach their goal unless there was perceived relevance for them. Although Meece's research centres on motivation in specific subjects, and not more generally where there appears to be little research, their research appears to fit in part with the findings of this study, suggesting that boys with the gendered self-concept inferred from the views of boys in this study, could be explained by this theoretical framework purported by Eccles *et al.*

In recent research Voyer and Voyer (2014) partly reinforce the work of Eccles *et al.* (1983) but also offer a different perspective. They suggest that how a task is approached is linked directly to the expectation of success and the value of the task. Where there is little value or expectation of success from completing the task there is likely to be a less motivated pupil. Considering these two factors of value and success for this subset of boys, the inference from the views expressed in the interviews would suggest that the boys do have expectations of success and they all have the potential to succeed. There may be a link between motivation and 'value' with 'relevance' or lack of relevance in learning playing a part.

The socialisation element does suggest that the home and school environment can impact on motivation, from a gendered perspective, on valuing academic learning. In all the case studies, boys voiced the view that they had support from parents, which was reinforced by teachers and parents, where parents were focused on their children succeeding academically. The findings suggest that parents would attribute value to academic learning. However, it is possible that parents and teachers could impact on motivation in the way they communicate their expectations along gender stereo-typical lines (Williams *et al.*, 2008), and suggest a different skill set or activities that reinforce a gendered approach (Meece *et al.*, 2009: 419). This is discussed in more detail in Chapter 10 in considering some recommendations arising from this study.

### ***Disruptive and distracting behaviour***

Being distracted was also a trait that was given some attention by the boys, being distracted at home and at school, but not particularly attributed to others but more of a self-generated trait.



*They (girls) seem to be able to manage the level of talking - know when to stop - some guys don't know when to stop (B4)*

As for disruptive behaviour, the boys in this study did not raise their behaviour or those of others as a dominant feature. Behaviour was mentioned by only three of the boys. One boys' group spoke about boys "mucking about" more (BA5), and there was one reference to talking out of turn (B13). What was clear was the recognition from the pupils that disruptive behaviour can disrupt others. Boys' behaviour has been a topic of research, with good behaviour, cooperation and strong work ethic attributed to girls, and typical boys seen as exhibiting poor behaviour and underachieving (Renold, 2006). However, poorer behaviour is not true of all boys (Forde *et al*, 2008), the boys in this study being a case in point. This could have been because of the particular group under study: those who had the potential to achieve and who did not see themselves as failing in an educational setting. However, teachers did raise boys' behaviour as an issue, with boys exhibiting poorer behaviour than girls (T2, T3, T7, T11, T12), but there is no certainty that the teachers were isolating the academically able advantaged boy from all boys and the inference is relative to girls and not based on criteria for 'good' behaviour.

### ***Influence of peer pressure***

This again was not highly reported in the interviews with only three of the individual boys expressing peer pressure as being present, and with one boy mentioning that peer pressure was not an issue (B2). This was one of the early comments in the interview process and was explored in the subsequent interviews but little was said about peer pressure. The point made in the group interviews was that there was some peer pressure in the early years of schooling but this lessened and largely disappeared with age.

In the socio-cultural setting of schools and the interrelationships present, pupils have an impact on their own learning and those of others. How peer groups and peer relationships, as well as self-perceptions and expectations, are interlinked with academic achievement, continues to be area that is widely researched. Riddell and Tett (2006) point to research that found the influence of the peer group was a dominant force. There is strong evidence that students organise themselves hierarchically, which can in turn influence behaviour (Warrington *et al.*, 2000; Lusher, 2011). The overriding view reported by some researchers is that peer pressure amongst boys was to not consider achievement as important or having value. (Whitelaw *et al.*, 2000; Forde *et al.*, 2008). Whitelaw *et al* (2000) even suggest that many boys may wish to achieve academically but are concerned about their being turned

into “pariahs” (p 98), and that as boys move up the school they appear to be more inclined towards seeing academic achievement as “uncool” (p 99). There are some researchers who question this stance. For example, Lusher (2011: 656) is critical of Connell’s theorising (Connell 1987, 1995, 2000; Connell and Messerschmidt. 2005) that “academically inclined boys are subordinated in a hierarchy of masculinities, predominantly because of the association of studiousness with the passivity of femininity”. Lusher claims that how masculinity and academic performance intersect depend on the context, and that there are different forms of masculinity. From this study of these academically boys, they appeared to be able to be successful and popular with peers by finding status or position within the social hierarchy of the school. From the evidence in this study peer pressure could not be confirmed as a significant issue and might be influenced by either the advantage of the boys in the school and/or their friendship groupings and/or the culture of the school, and runs counter to Connell’s theory.

It is worth noting here the response of girls who voiced their opinion about peer pressure, who said that there was peer pressure, but to do well academically (GA6) and this brought its own stress (GA5). This was echoed in School B amongst the girls particularly “*in a group of people that want to learn and achieve well*” (GB5), with this group also suggesting that there was a sense that failure was embarrassing in a high achieving group. In contrast in School C the peer pressure appeared to be on all pupils, boys and girls, to do well, with some girls suggesting that this pressure caused stress (GC6). The study by Skelton *et al.* (2010) demonstrated that for high achieving girls there was a perception that they were confident and able to deal with the demands of negotiating the educational system. However, their study indicated that the perception was different from how girls felt. Girls appeared to still be acutely aware of their gendered position as a girl, and, as such, problematised displaying confidence with academic study, which could explain the comments made about peer pressure and stress amongst some of the girls in School A.

### **9.2.2 Perceptions of gender identity**

The perceptions of gender from the stance of gender duality, as illustrated through the data gathered from the boys’ interviews, was strong. Their views of their own traits as boys, and their perceptions of the gendered traits of girls, was gender stereotypical, with boys’ behaviour and girls’ behaviour being perceived as separate and distinct. Views expressed ranged from girls being seen as more sensible and being more mature; and boys seeing themselves as lazy (B5, BA5), “*laid back*” (BA5), not being driven (B4) and giving up

easily (BA5), with girls being perceived as working harder (B12, B13). Girls were perceived to be more focused in class and doing more work at home (B17) with a boy placing less importance on performance (B5). One boy believed that teachers knew that girls were going to perform more highly, “*Teachers almost know that girls are going to perform better than boys*” (B9).

This was a surprising result and one which challenged my thinking of how to effect change in a school as Head Teacher. As described in Chapter 1, the school had a strong focus on learning through professional learning opportunities provided for staff, as well as opportunities to engage parents and pupils about learning. All pupils were encouraged as learners both through the learning environment provided, and through the early intervention and support available through the sophisticated pastoral care support system available, which aimed to meet the needs of individual learners. There was a dedicated support for learning service traditionally available for those with greatest need but the aim in School A was to have dedicated support for learning for all. The support system was such that all teachers had responsibility for engaging with pupils at this pastoral level as well as academically. There were many opportunities available for all both within the formal curriculum, including field trips, visits as well as extracurricular activities for both boys and girls. There were also opportunities for a strong pupil voice with pupils having regular discussions about their learning with their class teachers and their support teachers, as well as giving their views about the school and learning within the school environment. My perception, from the perspective of Head Teacher in the school, was that boys and girls did not appear to be treated differently. There did not appear to be gender stereotypical stances taken by staff when working with pupils. The focus was on learning that was meeting the needs of all learners. However, boys appeared to be ‘performing’ their gender through the way they expressed gender stereotypical views. The teachers’ and parents’ responses also suggested a general stance of essentialism.

The analysis revealed a gender perspective of boys’ constructing their gender in a way that was polarised, not just in how they perceived their own gender identity but in how they perceived girls’ gender identity. Although the work of researchers such as Mac an Ghaill and Butler advocated a multiplicity of gender identities rather than one fixed gender identity as discussed in chapter 3, nevertheless the boys would appear to be exhibiting the impact of ‘social stratification’ as suggested by Arnot and Mac an Ghaill (2006). One boy suggested it was the way girls were brought up that made the difference with girls having different personalities (B14) another saw the culture of society as shaping a person (BA5).

*“You want to be more active because that is the way you have been brought up – shouting and talking. And sometimes when you are put in a classroom and taught to be silent because you have been brought up, running about in the playground, it does affect you” (BA5).*

Butler (2006) describes gender as ‘performative’, where people ‘perform’ their gender, and these ‘acts’ give identity. As discussed in Chapter 3, Butler also suggested that how gender is ‘performed’ can be linked to the historical and socio-cultural context. Although advocating that gender could be as diverse as the ‘acts’, where these conform to cultural norms that are stereotypical, then the gender identity becomes polarised with a duality of gender. This is what appears to be seen from the results of the analysis in School A. Davies (2006) in her work found a similar outcome, as in School A, of the apparent essentialist gender construction that was perpetuating gender duality, which was also inferred from interviews in School B.

*“Concerning boys, I think there is a limit to how much difference the school can actually make because – I don’t want to say it is society – but it is expected of boys to be more rowdy and girls to be more studious. Even what they spend their time doing outside of school, it is expected that a girl will go home and study and a boy will go out and play football” (BB6).*

As well as young people having expectations and perceptions of their own ability and motivation, they have perceptions of others from an academic stance. Pupils identified differences between boys and girls. Girls thought that boys received more attention, and both boys and girls thought girls were better at learning, as found by Forde *et al.* (2008: 17).

The views of both boys and girls were that girls took more responsibility for their own learning, echoed by Younger and Warrington (1999) and had a focus on, for example good presentation of work, and wanting to better their performance and quality of their work. These characteristics were inferred from the boys’ and girls’ interviews. The views along stereotypical lines, which could be reasons for boys not engaging as fully in their learning, were also apparent in School B but not in the same way in School C. In School C, a girls’ group suggested that boys were more confident and some girls lacked confidence in their own ability (GC5), echoing Skelton *et al.*’s (2010) study of able girls, and that girls supported each other more. The teachers in School C suggested that girls worried more about their progress and took more pride in the presentation of their work. The boys did not give views that would suggest a gendered learner identity. Overall in School C there was little mentioned about gender differences that would suggest views of gender duality that was gender stereotypical.

Behaviour also appeared to garner an essentialist view of gender. The boys themselves did not give behaviour prominence, but there was a response from five teachers in School A suggesting that they believed that boys' behaviour was worse than girls. The classroom is "a regulatory and normalizing space" (Renold, 2006: 440) and this is a function of the relationships between teachers and pupils, and their behaviour and class control, and can be influenced by perceptions of gender.

Davison and Frank, (2006) suggest that young people perform their gender in line with what they believe is the dominant school culture. From the responses, there appeared to be cultures in Schools A and B that perpetuated gender duality in terms of learner identity from the stance of pupils, which seemed to be concordant with the views of teachers. There was a different response in School C, as described in Chapter 8. The culture in School C was one of achievement, with a learning culture that did not appear to be gendered. Boys and girls both appeared to have similar attitudes towards learning with similar personal characteristics that did not suggest gender duality. Little reference was made in any of the interviews in School C to gender difference.

Jackson's (1998) work indicated that academically able boys were able to achieve without appearing to work, and this seems to be the case for some in School A. The stress placed by the boys on their being "*lazy*" and not being motivated to learn could be explained with reference to the work of Francis (2010: 486) who describes both academically able girls and boys as "monological" as they perform their gender. What was inferred from the analysis was that there was an essentialist stance taken by boys, girls, and teachers in Schools A and B and parents in Schools A. However, Francis (2010) offers a different view. She claims that apparent essentialism does not necessarily mean that the boys and girls were essentialist but rather that this monological stance could be masking a multiplicity of views that could be considered as 'heteroglossia' where the underlying gender identity may be one that is not fixed and takes on different forms.

We may see patterns of gendered behaviours and inequalities as expressive of monoglossic gender practice, but within this be attuned to the complexity and contradiction at play (heteroglossia), both in the diversity of gender production, and in our categorisation of it (Francis, 2010: 488)

This is an assumption that cannot be confirmed from the data gathered but could be one explanation.

What is clear from the work of research into gender from a poststructuralist stance,

considering some of the research cited above and in Chapter 3, is that there is a need to explore how such a binary gender construct is addressed in schools and society if there is going to be a difference in the ways boys and girls perceive themselves as learners. This could be inferred from the data gathered in School C where there appeared to be no apparent focus on gender and there was no difference in attainment between academically able boys and girls. A comment by a participant in the girls' group in School B is pertinent:

*...there needs to be a lack of saying. "Boys and girls." There is a split right now and I think it should be a person (GB5).*

### **9.2.3 Summary**

The ability of the academically able boys to understand what supported and hindered their learning was without question. This was equally true of girls and in the main boys and girls voiced similar views about their learning. The three areas that appeared to be dominant for boys, considering all of the data associated with the boys in School A, were the importance of relevance in learning to engage the boys, which links with the other dominant characteristic of motivation, with boys voicing lack of motivation as a barrier to their learning. Despite being aware and able to voice the barriers to their learning, for example, lack of motivation, distractions and what they needed and wanted to be successful, it did not appear to be enough of a driver to change, as gleaned from the data gathered.

The perception of gender from the perspective of all who were interviewed in School A was generally one of gender duality, reinforcing characteristics of boys that could be hindering their learning and conversely characteristics of girls that reinforced their academic drive and ambition.

What did not appear to be dominant amongst these groups of academically able pupils as being a barrier to their learning were peer pressure, their literacy skills, disruptive behaviour, all of which have been proposed by researchers as being a potential cause of underachievement amongst boys. However, as mentioned earlier, the group of pupils under investigation in this study are academically able and advantaged and so the findings here are specific to this group and may not be representative of all boys.

### **9.3 Transferability**

To understand achievement and attainment of learners, the factors and strategies discussed above need to be considered in the local context of the school, hence the case study methodology. However, as rehearsed earlier concepts that are abstract could transcend 'place'. In an attempt to tentatively test the transferability of abstract concepts found in School A, interviews and grounded theory analysis were carried out in two further schools: School B and School C.

#### *School B*

From the results of the grounded theory analysis, the results suggested similar concepts and categories as School A, with little difference in the concepts identified to facilitate or hinder learning, and also a similar learner identity that appeared to be coloured by gender identity, that of gender duality. This School also had a gendered pattern of attainment where girls performed significantly better than boys.

#### *School C*

The categories of self-awareness of effective learning and self-awareness of barriers to learning, and the associated concepts were broadly in line with those found in School A. One difference worth noting was the competitive culture that appeared to be present with both boys and girls being competitive academically. The other notable difference was that there appeared to be no perception of themselves as learners from a gendered perspective and this was triangulated from the examination of the data gathered from the interview with the teachers. In School C there was no difference in performance between academically able boys and girls.

For both Schools B and C, the findings could not be taken as confirmatory because of the small size of the case studies but could point in the direction of gender perceptions having an influence on achievement and attainment. To confirm or refute these findings would require a larger scale and more forensic study than was carried out in this study. However, this attempt to look at transferability shows that it has potential. This is discussed in more depth in Chapter 10.

### **9.4 Emergent grounded theory**

The analysis of the boys' interviews suggest that the boys are confirming factors that have

been highlighted in the case studies examined in Chapter 5, particularly of engaging learning and teaching methodology and environments, including the quality of the teacher. However, there appears to be a gendered response to their self-concept of their learner identity. They appear to perform this gendered identity, not in diverse ways from a poststructuralist perspective, but one that is essentialist with gender as a binary construct as discussed above. In Chapter 8, the theory suggested in School A to explain academically able boys' underachievement, of **boys' self-realisation of successful learning is being limited by an essentialist construction of gender, with gender stereotypical characteristics. Gender is constructed as being bipolar, and with these two categories being mutually exclusive**, still appears to hold true after interrogating the findings in light of the academic literature and triangulated against the data gathered from the other participants in School A. This theory could also be applied to School B, which yielded similar findings to School A: School B having similar demographics and attainment profile. Equally the findings in School C, where boys were as successful as girls in their attainment, suggest that this tentative theory could still hold true, because of an apparent lack of gendered self-concept, and so there was no limiting effect on learning.

## **9.5 Concluding remarks**

This chapter raises some questions about how young people perceive themselves in terms of their learning and their gender, using a grounded theory methodology to explore views and perceptions of the participants involved in the research study. This study has revealed some possible explanations for the underperformance of boys compared to girls, in the academically able advantaged group.

Chapter 10 begins with a review of how the purposes of this study and the research questions have been addressed; and a critique of the methodological approaches used in this research study to gather and analyse the data: both the advantages and the limits. Chapter 10 concludes with some tentative proposals for those working in this field: policy makers, practitioners and researchers.



## **Chapter 10: Summary and recommendations**

### **10.1 Chapter Overview**

This study set out to explore the gendered patterns of attainment amongst academically able pupils in School A, a secondary school in Scotland, through a case study approach by gathering and analysing boys' perceptions of their learning. The pupils under study were all within the 16 to 18-year-old age range.

This chapter reviews the purposes of the study. Research questions were generated in response to two of the purposes of the study: *to examine academically able advantaged boys' perceptions of their learning and their learner identity; and the perceptions of others (girls, teachers, parents) in relation to learning and gender*. A response to the research questions is given as part of the review of the purposes. The review also includes a critique of the grounded theory proposed as a result of all the empirical evidence gathered in the context of School A. The transferability of this theory to other settings is discussed in relation to the findings in Schools B and C. The case study approach and the grounded theory method are evaluated and the strengths and limitations considered in the light of this study.

Some thoughts are shared, based on the findings from this study, of how policy and practice could be reconsidered in terms of gender to better meet the needs of young people today, in a world that seeks to recognise and value diversity. Further suggestions are offered that go beyond gender.

### **10.2 Review of the study's purposes**

The purposes of the study are reviewed below and each purpose is given in italics at the beginning of the relevant section. The next few sections summarise the literature review and the methodologies employed in the study and how they contributed to the thinking in this study. This is followed by the summary findings from the conceptualisation and categorisation process used to make sense of the data gathered, and the tentative grounded theory that appeared to explain the data. The review concludes with some suggestions for policy and practice.

### 10.2.1 Literature review and policy background

- *To review critically the literature from a Scottish, UK and international perspective, related to gender and gender construction specifically in education.*
- *To appraise critically current policy in Scotland on gender in education, and to examine how this, and associated support, offer insight and practices to support schools, particularly to improve performance.*
- *To appraise critically key studies on gender and attainment previously carried out from the field of research and consider how these support thinking and practice in the area of gender and attainment.*

The aim of the literature review was to develop insight into gender and gender construction (Chapter 3), the policy landscape on gender and attainment with a focus on Scotland and the UK (Chapter 4), and to critically appraise the key studies that had been carried out since 1996 to explore and address the phenomenon of the ‘gap’ in attainment between boys and girls (Chapter 5). The literature review was not to inform the construction of the study but to gain a deeper understanding of the areas explored. Because of the lack of research about gender and academically able boys, literature relating to all boys and girls was reviewed.

The literature review discussed in Chapter 3 revealed that historically, there has been ‘panic’ related to boys’ underachievement with a suggestion that boys were being disadvantaged giving rise to a ‘crisis of masculinity’ (Arnot and Mac an Ghaill, 2006). The modernist stance adopted at that time had been one of gender equality (Dillabough, 2006). The postmodernist/poststructuralist view emerging in the 1990s saw a move away from gender equality to a paradigm of gender identity, where society and culture were seen as influential (Haywood and Mac an Ghaill, 1997). What became apparent from the literature review on gender was the recognition of the complexity of the lives of young people in the modern world (Beck and Beck-Gernsheim, 2002) and the critical role that schools have in influencing a young person’s identity (Arnot, 2006). This postmodernist/poststructuralist stance emphasised the importance of considering difference (Hesse-Biber, 2012), moving from a fixed dual gender identity to one of multiplicity: ‘femininities’ and ‘masculinities’, and not seeing boys and girls as two distinct homogeneous groups (Frank, 1996; Connell, 2005; Dillabough, 2006). Going further, educational discourse, and how this shaped gender identity, also attracted prominence

amongst researchers (Butler, 1993; Reay, 2001; Davies, 1993, 2014). Butler's work focused on 'performativity' with gender being

A stylized repetition of acts ... which are internally discontinuous ... the appearance of substance is precisely that, a constructed identity, a performative accomplishment which the mundane audience, including the actors themselves, come to believe and perform in the mode of belief (Butler, 1990: 192).

Despite this 'new' thinking about gender, both Butler and Davies found in their work that there continued to be gender duality, with boys and girls acting out their gendered roles. Butler suggested that if the gender performed matched cultural norms that were stereotypical then there would be gender duality (Butler, 2006).

Moving to the second purpose of the study, exploring the literature on policy, and how this has been, and is now, constructed, shed light on the current position in relation to the gender/attainment debate. Chapter 4 gives the detail of this policy landscape. What was illuminating is how the policy changed with time and where the policy is now in Scotland, post devolution. From specific legislation and guidance to schools related to gender previously, this issue is now subsumed in a policy discourse around inclusion and poverty with no specific focus on gender.

There is clear legislation outlining the duties of schools and local authorities to address equal opportunities. Despite the duty on Scottish Government to report by gender, the mainstreaming report from 2015 (Scottish Government, 2015) does not refer to differences in attainment by gender. The focus appears to have moved to a "focus on reducing inequity in educational outcomes for all learners" (Scottish Government, 2015: 24). This mirrors what was found on examination of the *Equality Act 2010* legislated throughout the UK, including Scotland, which brought together all the equality legislation.

However, despite equal opportunities in the UK in relation to gender in educational provision being enshrined in law, examination of some of the guidance for local authorities from the EHRC (2012, 2014) revealed that the ambition of promoting equity for boys and girls in their educational provision and outcomes appeared to be missing. This omission is despite publicly available data showing the significant gap between academically able boys and girls (Scottish Executive, 2006; Scottish Government, 2008c; MacPherson and Bond, 2009, Scottish Government, 2013).

Forbes *et al.* (2011) in their research raised some pertinent issues for Scotland in terms of

addressing gender, and concluded that the lack of gender being overt as a policy imperative has diminished its importance, and so gender is not being addressed. It was also suggested that the focus on the ‘individual child’ has taken attention away from addressing inequity, whether this be related to gender or other factors.

One of the purposes of the study, to examine and critically appraise some key studies that sought to understand and/or advise policymakers and practitioners on addressing the phenomenon of boys’ underachievement, is detailed in Chapter 5. Ten key literature reviews/studies taking place in secondary schools (in Scotland, England, Wales and Australia) covering the period from 1996 to 2008, were examined. Both considerable time and finance had been invested in these reviews/studies. None of the research was longitudinal and most were short lasting. Collating the information from the studies revealed that a wide range of factors and strategies had been considered, and recommendations were given to tackle the phenomenon of boys’ underachievement. However, there was little or no evidence or emphasis on addressing the particular group under investigation in this study: the academically able pupil groups. What was significant was that despite the relatively large number of studies, demonstrable evidence of impact was small. This was due to: lack of data, and lack of time a project had been running. Improved capacity of professional learning amongst staff, and improved pupil engagement with learning, were reported in the Australian project. Most of the studies emphasised strategies, such as improved pedagogy and literacy, whereas others had a strong focus on understanding gender and gender identity, moving away from an essentialist stance (Skelton *et al.*, 2007). This was one of the findings from the Australian project, where some schools had used the freedom offered to address the complexity of gender using a ‘which boys, which girls’ approach, although the majority of schools focused on all underachieving boys. The key studies examined in Chapter 5 gave some useful information but there was little emphasis on professional learning of teachers with regard to addressing gender construction and identity through curricular provision.

### **10.2.2 Methodological approach**

- *To identify and use research methods that privilege the authentic voices of boys.*

From the literature review, in almost all the key studies examined there was little emphasis on privileging the authentic voice of pupils to explore their perceptions of their learning. This study adopted an approach that considered this apparent underachievement from a

discursive-praxis approach which searches for meaning through understanding the lived experiences of young people through their own lens rather than trying to simply solve the problem (Reed, 2006), which is what appeared to be the stance adopted by several of the key studies appraised in the literature review in Chapter 5. The approach adopted in this study gives an opportunity to explore the complex discourses that shape masculinities within the school context.

Timperley (2011a) in her paper on teachers' professional development advocates interviewing students about how they understand their learning as a source of evidence to help teachers build their own professional learning. This exploration of lived experiences is an important approach in researching questions related to pupil learning and attainment. The type of methodology that would allow pupils an opportunity to share their views in an open and unrestricted way, but would also yield data that could be analysed to build an understanding of pupils' lived experiences, was considered. This is the stance taken in this study: a phenomenological paradigm.

The two approaches used were a case study approach and a grounded theory approach. The grounded theory approach was used to explore boys' perceptions of their learning through semi-structured interviews and analysis of the data gathered. This approach was replicated for girls, teachers and parents in one case study (School A), and boys, girls and teachers in two further case studies (Schools B and C), to triangulate the findings in each of the three case studies. The findings from Schools B and C were used to consider transferability of the theory emerging from School A. The following sections give a critique of the grounded theory and the case study approach.

#### **10.2.2.1 Evaluation of the grounded theory approach**

As discussed in Chapters 6 and 7, the grounded theory methodology does not set out to prove a hypothesis but to build concepts and categories and a theory, where possible, from the data. The empirical data builds the picture (Glaser, 2002). The gathering of the data was done through interview (both individual interviews and focus group interviews), where the participants were allowed to speak freely with open questions used as much as possible, and my avoiding leading the discussion.

#### ***Strengths***

One of the key strengths of using grounded theory is that there is no attempt to prove a

hypothesis or a theory or fit data to others' findings, but knowledge is built that is grounded in the empirical data collected. In this case, grounded theory allows participants to explain how they experience their learning and to make sense of that experience, but it also allows the participants to both reflect on learning and to give opportunities to develop insight into their learning, sometimes subconsciously, and to allow the researcher to consider why people respond to their experiences. This opportunity for reflection could have longer term benefits beyond the interview. One teacher in School A remarked at the end of the interview, "*This conversation has motivated me to think what can I do*" (T8).

Secondly, the processes of gathering the data, theoretical sampling and coding for analysis are all processes that are systematic, rigorous and iterative. This deep response to the data collected aids credibility, validity and reliability (Strauss and Corbin, 1990). The iterative nature also allows changes to be made to conceptualisation and categorisation as more data is gathered and scrutinised in the light of previous data and inferences. This allows for data that is discrepant to be incorporated and reconsidered. Grounded theory is more than collecting and analysing data from an empirical sense. The systematic and methodological processes involved are its unique points compared with other qualitative methods.

A third strength of grounded theory is its use where the phenomenon under investigation is complex, which transpired in this study, with the interplay of gender and learner identity. The method allowed for this complexity to be addressed through conceptualisation and categorisation. Fourthly, the analytical method used allows a large amount of data to be gathered and analysed, particularly using the line-by-line coding adopted here, which makes use of all the data. Lastly, the synthesis of this coded data into high level abstract concepts allows for some degree of transferability to be considered, which was the case in this study, as the tentative grounded theory from School A was tested in Schools B and C. This in turn can "build knowledge and frameworks to guide practice" (Corbin and Holt, 2011: 116).

### ***Limitations***

Grounded theory relies on building concepts from the data collected. One of the limitations could be the quality and volume of the data, and being conscious that "the data is itself a construction and not a direct reflection of reality" (Corbin and Holt, 2011: 113). One of the principles, 'theoretical sampling', seeking to build on new concepts or ideas emerging through exploration in further interviews, was limited because of not having unlimited access to participants. The limitation of the volume of data was partly obviated by the

number of interviews carried out and being conscious of saturation. The quality of the data relied on giving participants the time and the space to express their views freely. However, I was conscious that the data was dependent on what was expressed. Some ideas, thoughts and opinions could have remained unsaid, either because they were not in the conscious mind or they were not considered important by the participants. I had to rely on the participants to voice as much as possible, but also to use my skills as a researcher and interviewer to question in a way that maximised the views expressed. Reflecting on the process of each interview, and memos noting points of interest, the interviews were largely deemed to be successful. In one or two cases, more prompting than was desirable was required.

Consideration also had to be given to the challenges that can arise from interviewing groups in terms of reliability and validity discussed in Chapter 7. The group interviews relied on all being willing to speak in front of each other and not to be overly influenced by the views of others. This was generally the case but there was one group interview (GA5) where there was a dominant girl, which I felt skewed the data gathered. This prompted a memo taken during the interview:

*The group was animated, and one girl in particular was very dominant. This dominant girl wanted to talk more than the others and so the interview was not as representative of the group. This could have an impact on the veracity of their comments. I continued to bring the group back to the main questions asking supplementary questions to refocus thinking. They seemed to like the opportunity to talk to each other. They seemed to be conscious of not disagreeing rather reinforcing with their own version of what was being said.*

Using memoing to note this type of interaction was important as it helped in the critical appraisal of the findings from the analysis.

In grounded theory, the limitations are as much about the researcher as about the method. The researcher plays a critical role in this approach and, as I found, the researcher must be able to tolerate uncertainty (Glaser, 1996, cited in Cohen et al., 2011: 603), particularly knowing that the reality described by the participants was subjective and was formed from their lived experiences in social contexts. The researcher must also be able to use data that is, by its nature, descriptive and employ skills of abstraction and conceptualisation. This is not without its challenges when grappling with the data to develop abstract concepts that could be applicable in other similar situations. Without concepts and categories there can be no grounded theory. But equally the researcher must be constantly reflective, being aware of the potential for bias (Kolb, 2012). This was something that I guarded against by

trying to step back in the interviews, and give prominence of place to the participants through a small number of questions and open-ended prompts.

As well as considering my role as researcher and the critical role played by the researcher in grounded theory, my role as both Head Teacher in School A and researcher must also be considered. The potential impact on the validity and reliability in this research of these dual roles as Head Teacher and researcher might be considered a limitation of this type of methodology where data is gathered through interview. Both being a head teacher and a researcher bring identities, identities perceived by others. Both roles can carry power, privilege and status. The perception could be that the role of Head Teacher could facilitate or hinder the interactions with the participants, but also influence what is being voiced by them because of the power dynamics between the position of Head Teacher and that of the pupil. Equally this could be the perception when considering the interactions between Head Teacher and teacher in School A. However, bias could equally be an effect of any interview with a researcher who is not known to the participants because of other aspects, such as gender, age, social class or status (Scheurich, 1995). Interviewers can “bring their own baggage with them” (Cohen *et al.*, 2011: 204). Interviews by their very nature are about interactions between people and so there is always the potential for the researcher to have influence on those being interviewed and consequently on the data (Hitchcock and Hughes, 2002) and Hitchcock and Hughes (2002: 165) also suggest that the main source of bias are the “personal characteristics of the interviewer” The onus on any researcher in this type of research is to be aware of what could impact on the data collected and to be aware of these personal characteristics and skills as a researcher as well as the ethical considerations in the research being undertaken.

My own identity and self-concept as Head Teacher in School A were defined by my values, including integrity, trust, social justice, and respect. These same values also define an ethical researcher. As Head Teacher, these values had a strong influence on the importance placed on relationships. These and other values were focused throughout my tenure on building and sustaining a learning community where all teachers and pupils were able to work together in an environment that was conducive to learning, with appropriate support provided for all: a culture of openness and one where all were able to voice their views. As part of the school’s self-evaluation processes I had worked closely with all staff and pupils to gather in-depth qualitative data focused on learning. As Head Teacher, my *modus operandi*, as part of self-evaluation, was to personally seek the views of pupils each



year through small group interviews. I interviewed half the school population in this way annually, about 450 pupils. This gave pupils the opportunity to share and give views about their learning but also for me to build a relationship with pupils. These conversations with pupils always seemed relaxed, with pupils energised and keen to voice their perceptions and opinions, showing a depth of understanding in being able to evaluate their learning experiences. The conversations were used to inform practice and pupils were aware of this. Other teachers also regularly had conversations with pupils about learning. It was a school where pupils were listened to. I also continued to be class committed and regularly visited classes, always talking to pupils about their learning. I also spent time with pupils in the wider school events and during the school day. These frequent exchanges helped to create a culture where pupils felt valued and went some way to lessen the implications of the power and status associated with the head teacher role. Seeking the perspective of pupils about what supports and develops but also hinders their learning is a defining aspect of this research.

The school was collaborative where all teachers worked together, sharing ideas and views, and there was a strong culture of collegiality. This culture of privileging and valuing pupil voice as described above, and collaborative learning amongst staff, illustrated in the intervention discussed in Chapter 1, formed the backdrop for this research.

Hitchcock and Hughes (2002) maintain that the researcher should take account of the power relationships in interviews, where the presence of any interviewer can affect the outcome of the interview and can be influenced by the relationship between the interviewer and the interviewee. In my case the relationships had already been established as described above, built on personal interactions with pupils and my reputation. Notwithstanding, the potential impact of power relationships was an important consideration for me from an ethical stance. Knowing the participants gave me a greater “sense of responsibility” (Floyd and Arthur, 2010: 2) to ensure that all steps were taken to reduce the risk of bias and influence on the data gathered and the interpretation of the data.

I was very conscious of the border making explained in section 6.3.3.2 and was at pains to reduce the impact of this, particularly from the perspective of my role in relation to the subjects being pupils and the interactions throughout the interviews, recognising that I had set the agenda, and the venue. To mitigate against the impact on the validity and reliability and always being conscious of ethical considerations, as outlined in section 6.4.1,

interviews were conducted as outlined in sections 6.4.3 and 6.4.4 with all participants attending as volunteers, who in the case of pupils in School A were all randomly selected for invitation and who were all over 16. Written consent was obtained from all parties (parental consent in the case of pupils) with absolute assurances about confidentiality and anonymity being given, as well as the opportunity for the participants to stop the interview at any time. The interviews were not expected to be long which was made clear to participants. The interviews were conducted in a venue that was neutral, and in a way that put participants at ease. I was conscious of language, trying to make sure that the participants were comfortable. I established a rapport from the outset through style and body language, one of “formal informality” (Iphofen, 2009: 59). I chose to use audio taping and some note taking, which I kept to a minimum to keep eye contact as much as possible, and used communication skills including active listening and non-verbal cues to show that what was being said was valued. The style of questioning was open-ended, unhurried, and time was given to answer the question, and with no leading questions other than supplementary questions allowed as part of the grounded theory method of theoretical sampling. It is important to reassert that the questions were to seek views about learning and not to seek why boys might be underperforming compared to girls, which could be considered more challenging. Being aware of the potential for power dynamics and status to be a potential barrier, there was no pressure put on participants to respond although this was not an issue in any of the interviews. Throughout I maintained objectivity.

The evidence, both from an observational stance as researcher and from examining the data showed the same open, relaxed and insightful conversations that were generally the norm in all the interviews in this study, both individual and group interviews, and in all three schools, which suggested that my role as Head Teacher in School A was not seen as a barrier to pupils talking about their learning experiences, and so was not limiting or having a negative impact on the research. The work of Mercer (2007) on insider status, discussed earlier, did claim that there appeared to be no obvious bias associated with being an insider. The additional steps to mitigate against the potential for bias due to my role of Head Teacher were the care taken with sampling, collecting sufficient data to examine for bias, synthesising the data as described earlier through the rigorous and systematic process that relied on accurate transcription of data rather than summarising response during the interviews, line-by-line coding, conceptualisation and categorisation, not taking a thematic approach that selects data from the transcripts but using all the data. The evidence from the interviews in all three schools suggests that the pupils in School A who participated,

particularly those I had interviewed as individuals, had not been influenced by my position as Head Teacher. The findings from all three schools were similar in terms of the quality and depth of responses. It was my aim throughout, to be conscious of ethical considerations and the potential for power dynamics to minimise bias in the data gathered through interviews and to maximise validity and reliability through the methodology employed.

There is also the danger of premature formulation of any theory. It is therefore essential to guard against this by ensuring ethical sampling of data, saturation, and being prepared to go over the data several times to seek the best fit of the data to the concepts. This brings in the question of time. The grounded theory approach in this study was demanding of time due to the large number of interviews carried out, the accurate transcription of all the interviews as well as the line-by-line coding used. This was necessary to develop accurate concepts firmly grounded in the data. The grounded theory approach, although building from the data up, does not assume that the researcher should have no knowledge or experience of a particular area. To be able to conceptualise from a position of strength, the researcher must have the requisite cognitive requirements and experience to draw from. This was not something I thought of as a limitation but rather a consideration. I was very conscious not to overuse my experience to bring pre-conceived ideas to bear.

#### **10.2.2.2 Evaluation of the case study approach**

The case study methodology was adopted to allow an in-depth approach to be taken in exploring the phenomenon of boys' underachievement. This method demands the use of more than one source of information, in this case seeking more than the views of boys. Quantitative data of boys' and girls' attainment was also informative. The case study in School A was extensive, the case studies in Schools B and C were less so.

#### ***Strengths***

The case study was a useful method because of the depth rather than the breadth of coverage. Large-scale data surveys, for example, may not capture the uniqueness and specific characteristics that can emerge in a case study approach. The location of each case study was the particular school, and it is this uniqueness of context that is one of the strengths. It allows the complexity and experiences to be examined from the perspective of the one context. The case study attempts to capture and represent reality, with participants building a rich picture of that context through their voicing of thoughts and opinions

through interview. Glesne and Peshkin share how

the opportunity to learn about what you cannot see and to explore alternative explanations of what you do see is the special strength of interviewing in qualitative inquiry (Glesne and Peshkin, 1992: 65).

The quantitative data was useful in School A to allow the research to be focused on the academically able groups, and was used to sample for particular boys and girls. Using both individual boys' accounts, and group interviews, gave a depth in School A that was not possible in the other two schools. Being able to interview a large number of teachers, as well as some parents, to triangulate findings in School A was also a strength, as this gave evidence for reliability and validity of the data gathered. With a wealth of useful data there was the opportunity to carry out the grounded theory interpretative and inferential analysis. Looking at the whole rather than the parts, rather than taking only one sector or group for investigation as "human systems have a wholeness or integrity to them rather than being a connection of traits" (Sturman, 1999: 103, cited in Cohen *et al.*, 2011: 289), is another strength of a case study. The capacity of a case study to capture thick descriptions is a key strength. The depth and richness of the data gathered through this case study approach facilitated the interpretation. The use of the findings from the case study could aid the school itself in considering next steps and help structure future research (Merriam, 2009). Lastly the way the findings are presented from a case study aids accessibility. There is no need to have expertise to be able to read and interpret the findings.

### ***Limitations***

Each case study is a unique interpretation of one context. As such the findings from one case study cannot legitimately be generalised. To obviate this, the case studies in Schools B and C were used to consider transferability of the abstract theory that emerged from School A, rather than seeking to generalise the raw data against the other schools. Case studies, because of the way they are enacted by seeking views from different participants, and bounded by a particular timeframe, are not easily able to be 'checked'. The use of a number of different sources of data allowed for triangulation, to mitigate against data being biased or selective. Researcher bias, as discussed above in the section on grounded theory, is also relevant here. To try to have a broad range of participants in all schools was the aim but in schools B and C I was reliant on others providing the participants. This is one of the limits as an 'outsider'. However, I found that despite there being only a small number of interviews carried out there was enough to give conceptualisation and categorisation and to compare the findings between schools.

### 10.2.3 Findings

- *To examine academically able advantaged boys' perceptions of their learning and their identity as a learner.*
- *To examine the perceptions of others (girls, teachers, parents) with regard to learning and gender.*
- *To generate conceptual maps of academically able advantaged boys' perceptions of their learning.*

The first two purposes were the rationale for the research questions posed. The next section gives a summary response to the questions and demonstrates how the first two purposes have been met. The conceptual mapping is considered in section 10.2.4.

#### 10.2.3.1 Response to the research questions

The high level questions posed were:

1. How do boys perform compared to girls in assessments, notably external examinations administered by the SQA?
2. What are the perceptions of academically able advantaged boys of their learning, including learning experiences that help learning and learning experiences that hinder learning?
3. What part, if any, does gender and gender construction play in influencing an academically able advantaged boy's learner identity?
4. What are the perceptions of learning from the perspective of girls, teachers and parents and how do these compare with the perceptions of academically able advantaged boys?

Each of these questions has been further explored and discussed in Chapters 8 and 9. The responses to these questions are given below.

#### ***Comparison of boys' and girls' attainment***

The main focus of this doctoral study was on the gathering of qualitative data: boys' perceptions of their learning. The attainment data in School A was used to justify this area of research because of the significant difference in attainment found between boys and

girls in the academically able groups. What emerged from this analysis of School A's data was that academically able girls had consistently outperformed boys in external examinations (administered by SQA) for all of the years examined, and at the most challenging levels there was a statistically significant difference. There were also differences between boys and girls in the other levels of ability examined but the differences were very small compared to those found amongst the academically able group.

In my role as a head teacher I had used comparator school data when seeking to compare my school's attainment data with that of similar<sup>36</sup> schools. The data in many schools showed a similar pattern to School A, but not in every case. This allowed me to select two other schools to use when considering the transferability of the findings from School A, by selecting one school that had a similar gendered attainment profile to School A, and one that showed little or no difference between boys' and girls' attainment in the academically able groups.

### ***Academically able advantaged boys' perceptions of their learning***

The boys in School A articulated clearly their perceptions of their learning and what they believed were the necessary methodologies and environments that allowed them to flourish and those that hindered their learning. The boys gave full and thoughtful accounts in almost all cases and they appeared to be confident to do so. There was a consistency in the findings arising from the boys' views in School A.

Although the boys were questioned about what facilitated and hindered their learning, these have been considered together as 'self-realisation of learning', to avoid artificial divisions. 'Self-realisation of learning' refers to the development of an understanding, on the part of an individual pupil, of themselves as learners and of their own learning. The perceptions of the boys fell into two categories: *extrinsic* concepts not controlled by the boys but relying on, or influenced by others; and *intrinsic* concepts that are traits of the boys themselves.

Of the *extrinsic* concepts those that were dominant were engaging varied learning methodologies, including practical work, groupwork as well as learning independently, and an environment conducive to learning. Copying from the board and working from a

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<sup>36</sup> Comparator schools are similar in terms of advantage and rurality

textbook were highlighted as hindering learning. Relevance in learning was given prominence, and was seen as a key influence in learning success and future career aspirations. The influence of the teacher, including a positive relationship with the teacher, was seen as making a positive difference by providing conducive learning environments: teachers being motivational and providing effective feedback. In contrast teachers not being interested in the whole person, or not being able to deal with disruptive pupils, were seen as barriers to learning. What was not seen as relevant was the gender of the teacher. Other aspects that did not draw much attention but are prominent in the literature were assessment methods and literacy. Involvement of parents, although not a prominent issue, was seen as positive and parents seen as supportive.

Of the *intrinsic* concepts those that attracted attention were the importance of work ethic, both working in school as well as studying for examinations, and the importance of motivation and the impact of the lack of motivation, including being easily distracted. This was not seen as attributable to others but self-generated. There was little reference to ‘academic’ competition. Competition was mentioned as being a trait in boys when linked to sport. Disruptive behaviour drew little attention, which would fit with a group who perceived that they had the potential to achieve, and who did not consider themselves as failing. Peer pressure not to do well was also not an issue that drew much attention.

### ***Boys’ learner and gender identity***

What was particularly interesting from the data gathered was how gender and gender construction appeared to influence the academically able advantaged boys’ learner identity in School A. The boys expressed views of their gender that inferred a gender duality along gender stereotypical lines, with boys’ and girls’ behaviour being seen as different, with boys seeing themselves as lazy, not being driven to do well, giving up easily: all features of a learner identity that is less likely to lead to success. In contrast girls were seen as having behaviour that would allow them to succeed: more sensible, mature, focused and hardworking. The way gender was played out from the data gathered in School A suggested that the boys’ self-concept was gendered and conformed to cultural norms. Conforming in this gender stereotypical way leads to polarisation of gender identity. This gender stereotypical view appeared to have a strong influence on how the boys perceived themselves as learners which in turn could be influencing their performance and hence attainment.

## ***Perceptions of learning from the perspective of girls, teachers and parents***

### ***School A***

The key concepts that emerged from the data gathered from girls, teachers and parents in School A generally agreed with those inferred from the data gathered from the boys. Both boys and girls gave a sense that they enjoyed learning and were not disaffected. The *extrinsic* concepts emphasised by the girls were learning methodology that was engaging and relevant, and the quality of the teacher, including good relationships with the teacher. Motivation was a key *intrinsic* characteristic and girls understood their roles and responsibilities related to learning. Competitiveness was raised by girls, although not as a dominant concept, but in their case, it was related to academic work rather than sport, as in the case for the boys. What parents and teachers suggested was that boys lack confidence. The boys had mixed views about confidence. Peer pressure was also not a concept that had a high profile with girls, teachers or parents. Considering the *intrinsic* concepts, lack of motivation and distractions had less prominence amongst girls. Literacy, in particular writing, was highlighted by teachers and parents but this had not drawn much attention from the boys themselves. What was confirmed from the data gathered in School A from girls was the evidence that suggested that girls also conceptualise their own identity and those of boys along gender stereotypical lines. This was also a similar picture emerging from the analysis of the data gathered from teachers and parents, giving the perception that they had a view of gender that was binary and gender stereotypical.

### ***School B***

The data gathered was not as extensive as in School A but served to consider transferability of the findings from School A. There was triangulation of the concepts drawn from the three groups: boys, girls and teachers in School B. As in School A the type of learning environment and methodology was important, with active learning finding favour, but working in groups was a concept seen as positive for girls but not for boys. Motivation was a key driver. Boys appeared to be less confident in asking for help, more likely to be distracted, and exhibit disruptive behaviour and lack motivation. Peer pressure was present but as a positive driver. As in School A, parents were seen as supportive. The gendered characteristics inferred from all three groups pointed to a gender essentialist stance as found in School A, with this gender identity appearing to influence the learner identity.

### ***School C***

As in School B, the data gathered was only from a small number of interviews with groups



of boys, girls and teachers. The views expressed by all were positive about the school and its strong culture of achievement with a focus on the effective strategies for learning that the school employed. A range of learning methodologies were advocated as supporting effective learning as was the importance of the positive influence of the teacher. Girls and boys appeared to be motivated to do well and to take responsibility for their own learning and achievement. Competitiveness to do well academically was a dominant concept and expressed by both boys and girls as a significant driver. Parents were supportive as in the other two schools. A key point was that none of those interviewed appeared to describe a gender essentialist view, with boys and girls describing themselves in the same way as learners rather than along gender stereotypical lines.

### ***Summary***

The academically able pupils interviewed in all three schools appeared to understand what was required of them to achieve highly. Engaging and active learning methodologies, and an environment conducive to learning, as well as the quality of the teacher, were all highlighted as being important. The gender of the teacher was not seen as important in any of the schools and neither was negative peer pressure. Supportive parents were mentioned in all three schools. Pupils were not viewed as disaffected. Motivation was a dominant concept with the lack of motivation amongst boys in School A and B drawing attention. Competitiveness was a concept that was attributed to sport in boys in Schools A and B but was a key concept in academic success for both boys and girls in School C.

Gender construction along gender stereotypical lines was the significant difference between Schools A and B, and School C where this was not found from the data gathered. In Schools A and B there was duality of gender: an essentialist stance inferred from the data gathered from all groups. In School C, boys and girls did not express polarised gendered views and neither did the teachers. The views expressed were linked purely to their learning and not to any gender characteristics.

### **10.2.4 Conceptual mapping**

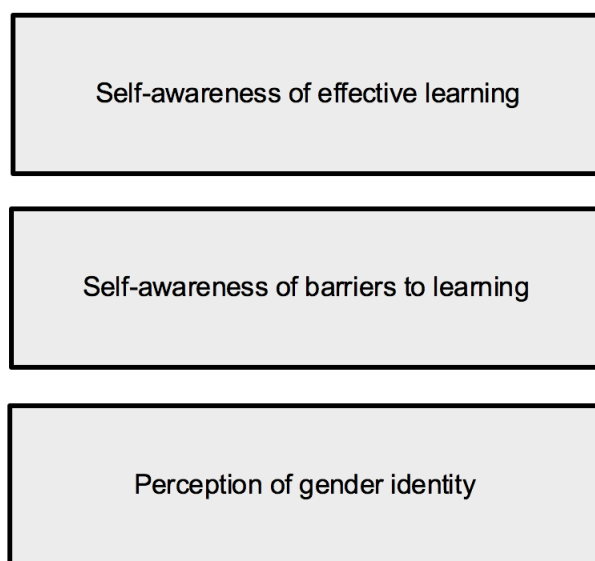
The previous section demonstrates how the first two purposes have been met. The conceptual maps were an outcome of the grounded theory analysis. Maps were generated for each group of participants. These are given throughout chapters 8. The conceptual maps as they were used here, with the size of the box representing the *dimensions* of the concepts, was an attempt to illustrate the frequency accorded a concept by the participants.

This was most reliable for the individual boys' data and the teachers' data in School A because of the volume of data collected, and less so for the data captured in the rest of the interviews in School A, and in Schools B and C, because of the limited data collected.

The advantages of using conceptual maps were that it gave a method of representing the concepts but also showed linkage between concepts (*axial coding*) in a way that was meaningful and illustrative (Jackson and Trochim, 2002). Another advantage was the ability to illustrate concepts in a way that allowed them to be compared between the different groups of participants and to establish similarities and differences, facilitating the comparative study of the data in and between schools. The iterative process of constantly examining the concepts as the interviewing and analysis proceeded allowed the maps to be easily examined and adjusted. Conceptual maps are also easily accessible and understood by others who have not been involved in the research. Conceptual maps are more advantageous than lists or tables or narrative as they are able to show coherence and linkage of concepts in a more overt way.

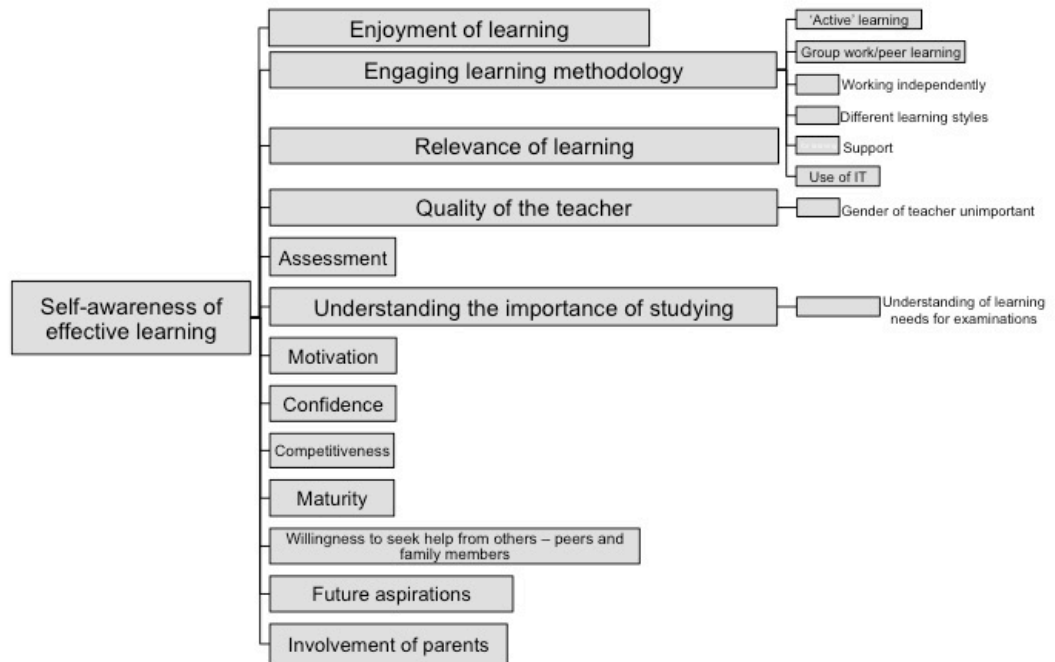
Data captured in this way does not give the detail that would be seen in a narrative but use was made of the transcripts and the coded data when discussing the findings in chapters 8 and 9 (Stake, 2005: 460).

The three key categories that emerged were:

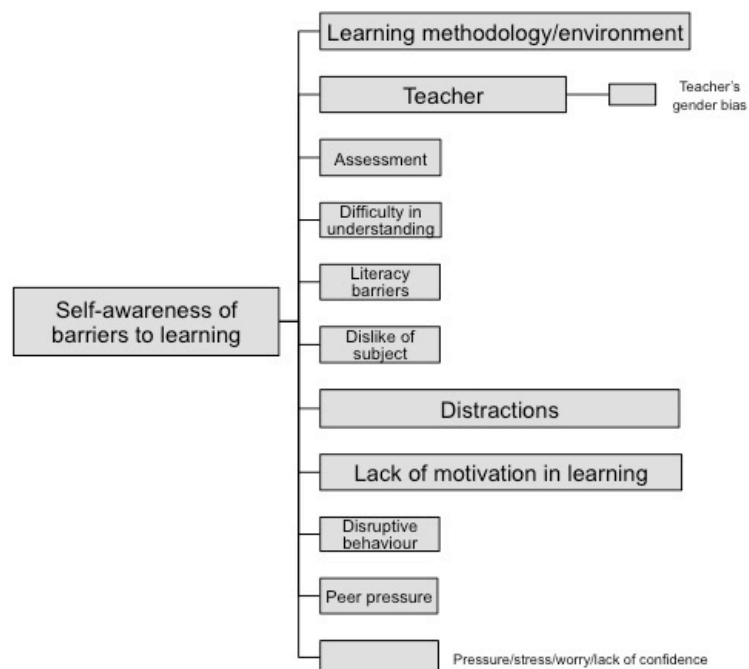


The conceptual maps for the individual boys and groups of boys in School A given in Chapter 8 are reproduced below.

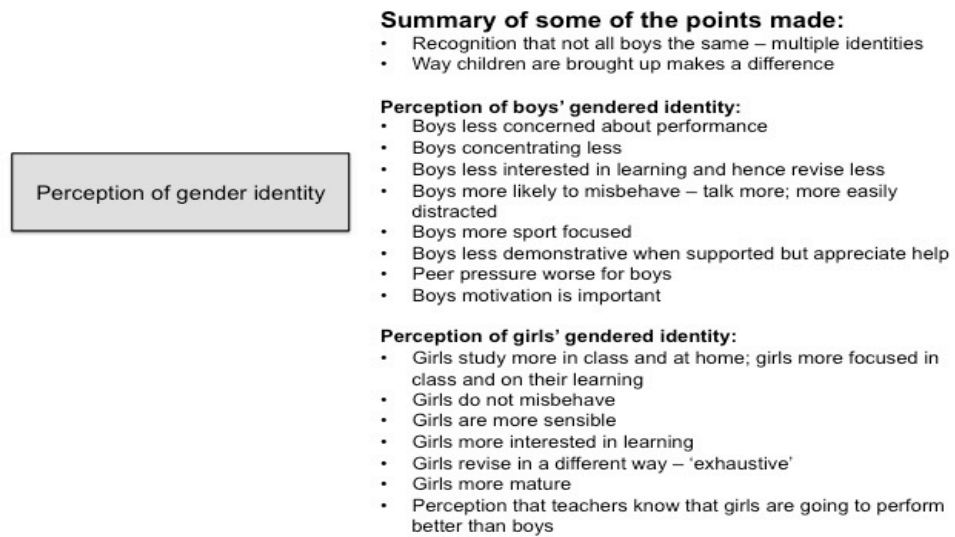
**Fig 8.2: Category: ‘Self-awareness of effective learning’– individual boys**



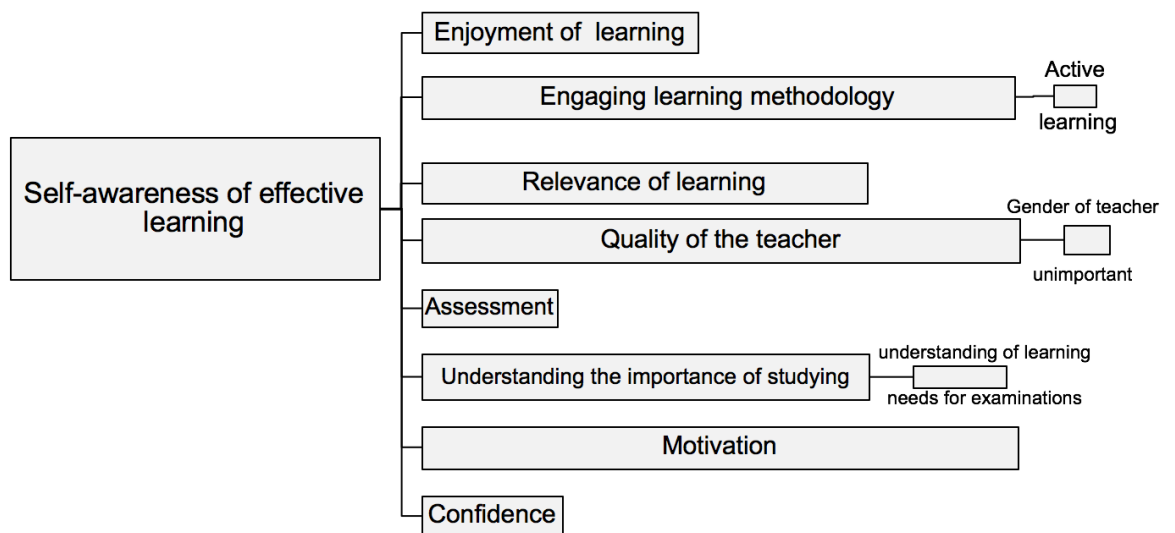
**Fig 8.3: Category: ‘Self-awareness of barriers to learning’– individual boys**



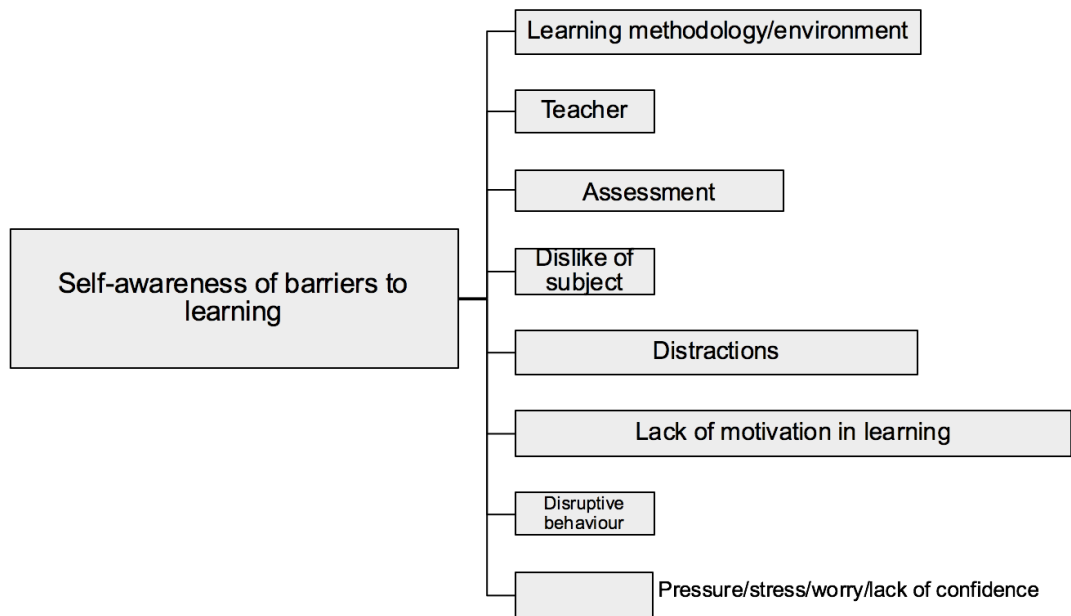
**Fig 8.4 Category: ‘Perception of gender identity’ – individual boys**



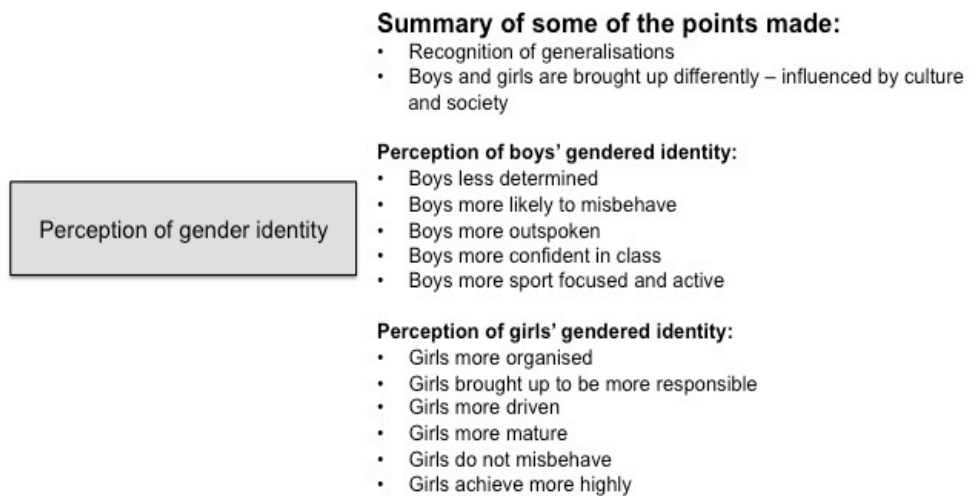
**Fig 8.5: Category: ‘Self-awareness of effective learning’ – boys’ focus groups**



**Fig 8.6: Category: ‘Self-awareness of barriers to learning’– boys’ focus groups**



**Fig 8.7: Category: ‘Perception of gender identity’ – boys’ focus groups**



#### 10.2.4.1 Emergent grounded theory

One of the key aspects of grounded theory is for a theory to emerge from the data. The theory that emerged was that **where there was significant difference in attainment between academically able boys and girls, boys' self-realisation of successful learning is being limited by an essentialist construction of gender, with gender stereotypical characteristics. Gender is constructed as being bipolar and with these two categories being mutually exclusive.** Thus, the perception of themselves as a 'boy learner', as demonstrated by these academically able advantaged boys, seems to be a limiting factor. This theory appeared to transfer to School B where there were similar concepts and categories as School A, including a polarised view of gender that appeared to influence the learner identity of boys and girls. The theory could also be considered as being transferable to School C where the boys and girls were not hampered by gender influencing their learner identity and where there was little or no difference in attainment by gender.

The data gathered from teachers and parents in School A also reinforced this essentialist stance of gender duality. The provision of learning and response to learning in School A appeared to be tethered to perceptions and lived experiences of young people as gendered beings who 'perform' their gender in a culture that appears to continue to emphasise duality along gendered lines. Although a much smaller case study with limited data collection, this also could be a possible interpretation of the culture in School B. Findings from School C suggest that there is malleability about learning and gender, and this is a function of the culture: a culture that appeared to transcend gender duality. However, culture can be deliberately shaped and changed (Fullan, 2005). Gender as a concept is socially constructed and a result of social forces, and as such is not inevitable, which is the assertion of Simone de Beauvoir in her seminal work *The Second Sex* (De Beauvoir, 1953), and other poststructuralist feminists. The findings in School C suggest that a school can have a culture that transcends gender.

#### 10.2.4.2 Critique of the theory

One could argue that the theory developed in one case study, in this case one school, could only be applied to that one context. However, the grounded theory method propounded by Glaser (2002) advocates that conceptualisation transcends 'time', 'place' and 'people' and as such the theory would also follow these principles. The use of Schools B and C was to consider the transferability of the theory, and the evidence suggests that the theory could

be considered valid in these other two schools. There is no suggestion that the theory could be applied to other contexts, or be extrapolated further unless a similar case study/grounded theory approach were used in other test sites, with similar boundaries: age and ability and advantage of the participants. The theory therefore could only be considered valid in the three schools, with more certainty being attributed to the theory in School A. The theory is constructed from data that is a recounting of participants lived experiences from their perspective, and this data is interpreted by the researcher. The theory is only therefore as good as the data and the skill of the researcher. A criticism levelled at grounded theory is that it is not reproducible but can be considered verifiable. To be reproducible would demand a context and conditions that exactly matched those where the theory was generated, but in the *social* world reality is only real to those living in that world (Mjøset, 2005). However, this can set a framework for other studies to explore different school contexts and examine findings to see if these concepts have a more universal applicability. What is certain is that the grounded theory is rooted in the experiences of the participants.

#### **10.3.4 Recommendations for policy and practice and the wider educational system**

- *To explore critically the application of the findings to policy and practice related to gender in schools and make recommendations for further development to effect change in the education system specifically about gender.*
- *To make recommendations based on the findings to effect change and improvement in the education system more generally.*

The findings from this study appear to indicate that how gender is considered and constructed has consequences for outcomes, in this case for boys in the academically able group. The three case studies, as discussed above, give results that are specific to those contexts. However, in the light of the literature review, the case studies and the theory emerging from this study there are suggestions that could be offered for future policy and practice, which realises the first of the two purposes listed above.

The last purpose seeks to make recommendations for the education system in a wider context, as some of the outcomes of the practice adopted in this study are extrapolated.

#### **10.3.4.1 Policy and practice related to policy**

The review in Chapter 4 clearly indicated that there is aspiration on the part of Scottish Government to address the gender gap and there is policy in place. The duty on local authorities and schools is outlined. However, as pointed out by Forbes *et al.* (2011) the legislation has moved away from a specific focus on gender back to a focus on the individual child. This study would suggest that policy, and related support, should have a renewed focus on the gender related attainment issues that are in evidence, and looking particularly from the perspective of different ability groups of pupils, having a more nuanced approach to which boys and which girls. Policy and legislation should take account of the work of Butler and others who advocate that there should be a move away from gender as a category of analysis (Dillabough, 2006) to a deeper understanding of gender discourses and diversity of masculinities and femininities. However, this is part of the paradox because there is a need to consider gender to point to the issues, but being explicit about gender as a category can lead to duality of gender. Schools have a critical role in shaping identity, and the opportunities afforded by a shift in policy could begin to address the overreliance of gender as a binary category. However, Skelton (2001) argues that in response, support agencies, such as Education Scotland, and schools should not simply develop a policy that gives a list of ‘things to do’ to address issues of gender, but rather a set of questions on which to base professional dialogue and learning.

This study examined the case of the academically able advantaged boys, but other studies could seek to explore disadvantaged girls as well as disadvantaged boys. This refocus on gender and gender related issues would heighten awareness amongst practitioners. This is not to suggest that focus on other aspects of diversity should be lessened, rather the contrary: that all areas of diversity should have specific foci. What the research has shown is that there is a mandate from the Scottish Government and the UK Government to address and ensure ‘equity’ in educational settings and this is legislated in the *Equality Act 2010*. I am using the term ‘equity’ rather than ‘equality’ as debated in section 3.2.2. To address the requirements of the Act, which covers all categories of difference, demands a wider strategic view of educational change. Offering a different stance to address these phenomena, could begin to break down barriers.

#### **10.3.4.2 Recommendations for schools**

Recommendations arising from this study for practice in schools are firstly, to provide



models of professional learning for teachers and educators, as well as others who are working with children and young people, that addresses issues such as gender at a fundamental and philosophical level. Secondly as part of the professional learning of teachers, consideration could be given to the use of the type of qualitative methodologies used in this study. Thirdly, we know that schools cannot effect change alone. Parents, families and communities play a vital and significant part in shaping a child's life. Suggesting ways that schools could work differently with parents is also recommended: gathering parents' views, and analysing these via grounded theory, and working with parents on issues related to gender (Pahl and Kelly, 2005) and learning. Lastly, it is suggested that listening to the authentic voices of learners, when grappling with some of the issues, could enhance understanding and offer alternative solutions.

### ***Professional learning for teachers***

If policy makers and practitioners shifted the focus to deepen professional learning amongst teachers about gender and the related issues, as advocated by Skelton (2001), this would give an opportunity to have an impact on the diverse groups of learners. Giving gender as an example, professionals need to have different types of training. The questions suggested by Skelton focus on exploring gender from a stance that questions how gender is perceived and how teachers should respond. The questions posed by Skelton (2001: 173) are:

- What images of masculinity and femininity are children bringing with them to school... and what types are they acting out ...?
- What are the dominant images of masculinity and femininity that the school itself reflects to the children?
- What kind of role models does the school want and expect of its teachers?
- What kinds of initiatives/strategies/projects should teachers be undertaking with children to question gender categories?

Although Skelton's work is centred on the primary sector these questions would equally apply to the secondary which has been the focus of this study. It is not enough to give strategies and 'packs' to address the perceived gender issues, whether they are related directly to attainment or other issues, for example behaviour, unless this is focused on a deep philosophical understanding of identity and how this is influenced by the society and culture in which we live and learn. There cannot be change unless there is awareness and an understanding of gender. If staff are aware of the issues and how they are responding to gender, this could and should lead to a better learning environment for pupils; in the case of teachers and educators, to developing gender 'sensitivity' within classroom and other settings, discussed previously in Chapter 3. For example, Jackson (1998) recognised the

stereotypical male behaviour of disrupting and acting out and not seeing academic achievement as important. Rather than dealing with this type of behaviour as an accepted ‘boyish’ trait, he advocates a positive, proactive stance with schools providing a place to challenge and question this hegemonic masculinity, and developing a curriculum that gives opportunities to consider the complexity of masculinities.

With specific reference to this study, with the theory suggesting that gender construction and gender stereotyping is hindering attainment, teachers need to be able to deliver programmes that offer self-realisation through a ‘growth mindset’ (Dweck, 2012) that transcends gender construction. Programmes should be provided that give pupils an understanding of how to improve as learners but also how to consider their gender through a gender sensitive approach, and not one where the approach is continuing to reinforce gender duality (Forde, 2014).

This study has also revealed that pupils are conscious of what they believe is important for their learning. The pupils offered suggestions for teachers: providing high quality learning and teaching that is relevant and engaging, delivered by skilled professionals, who are able to form effective relationships with learners that motivates and builds confidence and success. This should all be within an ethos that develops gender sensitivity, both through learning programmes for pupils, and professional learning for staff. Martin (2004), when he was exploring motivation amongst boys and girls, concluded that what was needed was “quality pedagogy” (p. 143). This is supported by research by Osborn (2004) who carried out a comparative study between three countries, which showed that how pupils perceived school was dependent on the national culture and how education was seen. The pupils’ attitudes to their learning appeared to be influenced by this wider culture. In Denmark where there appear to be fewer gender related issues, there is a belief that this is due to a careful balance of the curriculum into ‘affective’ and ‘cognitive’ curricula. Young people are expected to take responsibility for their own learning and there is an understanding of gender. This again raises the question of effective professional learning opportunities for teachers and other educators.

Another example is how schools try to respond to gender related issues. The response is sometimes centred around the provision of gender-oriented texts, pedagogy, and role models. However, this must be questioned in the light of a deconstructivist approach to gender and an approach adopted that focuses on gender *sensitive* rather than gender *friendly* approaches.

The response of the teachers in Schools A and B tended to portray a gendered response. Discussion earlier did focus on how boys and girls construct their own identities, which can influence the teachers' perceptions of the learner (Jackson, 1998), as well as parents' expectations of the child (Sukhnandan, 1999). Voyer and Voyer (2014) found in their study that boys' and girls' stereotypical behaviour could influence the teacher in how they perceived boys and girls. The evidence from their study also indicated that their thinking of gender stereotypes shaped the teachers' views of underachievement, which might influence teachers' expectations of boys and girls. Teachers' negative impressions about boys who are distracted can further their disadvantage and lead to low expectations and poorer teacher-pupil interactions (Hutchison, 2004) and impede learning (Tinklin *et al.*, 2001). Jones and Myhill (2004) in their research asked teachers to select high achieving and underachieving boys and girls for the study. The criteria given were not gender specific and yet the teachers appeared to be influenced by gendered behaviour for the selection.

Teachers' perceptions play an important part in addressing underachievement (Jones and Myhill, 2004). Engaging with all pupils, boys and girls, demands that teachers have an understanding of gender construction and identity, how this is played out in classroom settings as discussed earlier, as well as the perceptions of pupils, whom Whitelaw *et al.* (2000) found had perceived gendered patterns of behaviour and achievement. Whitelaw *et al.* (2000) found in their study that some teachers did not consider gender and the implications of gender. Teachers may believe that there is gender equity in their classrooms (Sukhnandan, 1999), but may not be aware of gender interactions happening in the classroom and how these interactions could be leading to gender inequity. This could influence engagement (Guzzetti *et al.*, 2002). Pace and Townsend (1999) assert when students are appropriately supported by the teacher, gender role stereotyping can be transcended by the students. Teachers have a critical role in countering stereotypical responses, for example explaining how to read text critically, questioning gendered values and attitudes (Guzzetti *et al.*, 2002). Despite attempts by teachers to be aware of gender, the gendered interactions between class members can lead to gender inequity (Guzzetti *et al.*, 2002). Teachers, having an understanding of the type of gendered discourse and interactions that dominate and influence classroom culture, can help to find solutions. Raising awareness with students about gendered patterns of discourse can bring about change (Guzzetti, *et al.*, 2002). Whitelaw *et al.* (2000) recommended that teachers develop their understanding of gender and of the perceptions of pupils.

In conclusion, this study has focused on groups of learners who are academically able and

the focus has been on gender. What this study has shown is that to bring about fundamental and sustainable change in education systems, whether it is addressing the issue of gender, race, inequity due to socio-economic barriers, or any other area where there is a divergence of outcomes due to difference, a different model for educational change as suggested by this study, is worth some consideration.

What is important is developing in professionals a perspective that encourages the use of the wide range of academic research available and the ability to critique research, policy and practice. This is one of the ambitions of the Scottish Government as outlined in the Scottish Government commissioned work, *Teaching Scotland's Future* (Donaldson, 2011).

Recommendation 2 from the report states

Education policy should support the creation of a reinvigorated approach to 21st century teacher professionalism... to build the capacity of teachers, irrespective of career stage, to have high levels of pedagogical expertise, including deep knowledge of what they are teaching; to be self-evaluative; ... and to engage directly with well-researched innovation (p. 84).

And Recommendation 43:

National strategies need to be developed to prioritise and address areas within the curriculum where evidence, such as from national and international benchmarking or inspection, shows that there is a particular need to improve learning, teaching and attainment (p. 99).

In summary, Timperley gives some sound advice which mirrors the suggestions in this section, which focuses not on the 'craft' of the teacher but more on professional enquiry (Timperley, 2011b) with teachers asking questions of themselves: "where am I going?", "how am I doing?" and "where to next?" (Timperley, 2011a). Giving teachers opportunities to question assumptions through professional learning and a methodology that allows a systematic and in depth way of exploring assumptions/phenomena brings a deeper understanding that can shape behaviours. Teachers then become change agents.

### ***Use of research methodologies as part of professional learning***

As teachers grapple with issues in their own contexts, the case study methodology used in this study lends itself to being used in a school context. For teachers working in their own schools, where they are able to access quantitative data as well as being able to carry out interviews, observations and surveys, there could be opportunities to develop a rich tapestry of information to inform thinking. Working as professionals on particular challenges within their own setting would also allow studies to inform policy, learning and

practice, and for this to be monitored and tracked using evidence gathered. Rather than a short case study as in this case, researchers working in their own context could conduct an enquiry over a longer period bringing about change and sustainability.

This research has also shown the usefulness of grounded theory as a methodology to find explanations of phenomena in a particular context that may or may not be transferable to other contexts. This methodology is one that could be adopted in a range of settings to begin to explore different phenomena. This type of enquiry, initiated by teachers and other educational professionals, would supplement and complement the use of large scale studies across different samples of schools, and build a profession that is the aspiration of *Teaching Scotland's Future* (Donaldson, 2011).

### ***Implications for schools working with parents***

Recognising that parents, family and the community all have a part in shaping children's lives and identities, this study has shown the value of engaging directly with parents. Parental engagement continues to be an area that dominates strategies to improve learning (Scottish Government, online c) and now, in 2016, is a key plank of the Scottish Government's *National Improvement Framework* (Scottish Government, 2016). Parents have a crucial role in their child's life. Working differently with parents as partners in a child's education could begin to see a shift both in engagement of parents and in outcomes for their children, as they work with schools and early years' settings to better understand learning and, in the context of this study, gender, and the part that they could play in challenging gender stereotypes. A new type of professional learning suggested for teachers and educators, as described above, could support this type of partnership working with parents, through joint activities and through use of grounded theory as a qualitative method to explore views.

### ***Importance of 'pupil voice' in improving learning***

Lastly, this study has shown the importance of 'pupil voice' in developing new thinking about issues including gender. The consideration given to pupil voice, as a means of improving learning and schools, has been a focus of a range of researchers (MacBeath *et al.*, 2003; Fielding and Bragg, 2003; Flutter and Rudduck, 2004; Kellett, 2005; Arnot, 2006; Flutter, 2007; Hulme *et al.*, 2011). Pupil voice ranges from consultation and evaluation (MacBeath *et al.*, 2003; Flutter and Rudduck, 2004) to pupil agency, and the contribution of pupil voice to teacher development (Fielding and Bragg, 2003; Flutter, 2007; Kellett, 2005). This study demonstrated the ability of pupils to articulate their views

about learning. However, Hulme *et al.* (2011)'s review of pupil participation in Scottish schools would suggest that giving pupils agency is not a prominent feature. This study, giving centrality to pupil voice, has developed a deeper understanding of boys' lived experiences as learners. And further, this process has a pedagogical dimension in enabling pupils to develop their 'self-realisation in learning', understanding themselves as learners and the process of learning. Our role as educators is to genuinely listen to this authentic voice and not just from a standpoint of gender. Pupils themselves, through the close attention of educators to pupils' views, will have a better opportunity to shape their own learning. This will require the enlightened professional, as advocated above, and pupils to work together and to move from 'pupil voice' to 'pupil agency'. Fielding and Bragg (2003) suggest the benefits are:

- developing a positive sense of self and agency;
- developing inquiring minds and learning new skills;
- developing social competences and new relationships;
- reflecting on their own learning;
- a chance to be active and creative (p.15).

Whether this is in an enquiry role as in this study, or in working together planning programmes that better match aspirations, there is a need for pupils to understand themselves as learners, but within a wider societal context. Head (2011) considers this form of inclusion as 'complementary' pedagogy, which allows for learner agency, with pupils being given ownership of their own learning. The professionals could provide the framework for these programmes based on the published research but also on their own research as enquiring professionals.

## **10.4 Summary**

This enquiry began in 2002, when, as a new head teacher, I identified the difference in attainment between boys and girls in the external examination results for S4, S5 and S6. Although I made changes to try to reduce the gap between the attainment of academically able advantaged boys and girls, the gap remained. This led to this research taking the stance of the 'learner voice', exploring the views of boys about their learning.

The findings from this study contribute to several areas of research: the educational gender gap, gender identity, qualitative methodology, pupil voice and professional learning. Unlike much of the other research seeking to make sense of the gender gap in attainment between boys and girls, including almost all of the commissioned studies examined in

Chapter 5, this research did not focus on all boys but focused on the group of boys and girls where the gender gap existed, the academically able group in the school under investigation. The statistical performance data examined in the case study school, School A, revealed that the only *significant* difference in attainment was between academically able boys and girls, hence the focus on this group. The other ability groups of boys and girls did not show a statistically significant difference in performance by gender. In addition, the boys who took part in the study were not disadvantaged: they did not have recognisable barriers to their learning, but could be considered advantaged coming from middle class backgrounds. Although this study was to make sense of the gendered attainment pattern in School A, statistics examined in other schools in Scotland and nationally (Chapter 4) showed similar patterns, the gender gap in attainment being amongst the academically able group. This research revealed new findings for the academically able group of boys. The academic literature seeking to make sense of this gap in performance between academically able boys and girls appears to be limited and so this research is adding to the body of knowledge, highlighting the importance of identifying which groups are underachieving and then focusing the research on this group, and offering one explanation for the gap.

This study also uses a different methodology to the work commissioned by Governments, particularly the Scottish Government, that was examined as part of this research (Chapter 5). Rather than testing a hypothesis or beginning with an assumption, for example that boys are more reluctant to engage with literacy activities, this study has taken an interpretivist stance, using a grounded theory approach, with a focus on seeking boys' views of their learning and being a learner. The use of this methodology has offered an example of the effectiveness of this way of working in the education field, providing a deeper understanding of boys' lived experiences. Grounded theory is rigorous and systematic and uses all of the data gathered to synthesise into concepts, categories and eventually a theory, grounded in the data. The processes of induction, deduction but most of all abduction lead to new ideas and ways of thinking about the phenomenon under investigation. This study has also developed a conceptual mapping that helps to synthesise, compare and present data that could be a valuable presentation tool for others working in the research field.

This study did not set out to explore the question of gender identity. However, the findings in School A led to a theory that suggested that the boys had self-realisation of successful learning, that is they showed insight into their own role as a learner and the processes of

learning, but their learning was being limited by their gendered views of themselves, with gender stereotypical characteristics. Boys also generally appeared to have similar views as the girls about the influence of gender regarding learning: that boys and girls are two separate and internally homogeneous groups, each group expressing different learner attitudes and behaviours. This finding indicated that both boys and girls had a gender construct that was bipolar. The findings from School A were considered in two further schools, Schools B and C, to test for transferability of the theory. School B had similarly gendered patterns of attainment to School A and the findings in School B were similar to those in School A, which could be considered as an affirmation of the theory proposed. In School C, where there was no gendered pattern of attainment, there was no sense of gender being a barrier within the learning environment. The only discernible identity was that of a learner. This again provides other researchers with some evidence of the use of this methodology to move from specificity in one local context to transferability. There is a caveat to the findings from these studies because these were only three case studies carried out in three similar secondary schools in Scotland. Further research would be required to see how general or universal the findings from this study are.

Hulme *et al.* (2011) in their study claim that pupil agency is not prevalent in Scottish schools. This study has given centrality to pupil voice and claims to add to other studies where pupil voice has been privileged over other ways of gathering data, demonstrating the importance of pupil agency as a means of learning about the lived experiences of the learner. The views of boys were the primary data with the findings triangulated within each case study drawing from the views of others: girls and teachers in all three schools, and parents in School A.

The findings from this study add to contemporary thinking about the intersectionality of gender identity and learner identity (Haywood and Mac an Ghail, 2013). The study raises important questions for policy makers. The knowledge gained raises the issue of the lack of profile that gender and gender identity has both in policy terms and in teachers' professional learning. This research offers a perspective for professional learning for teachers that is not aimed at 'fixing the problem' with a 'pack' but one which would advocate teachers reflecting on the concept of gender and critically appraise its construction in the educational discourse, particularly the impact of this construction of gender on their professional practice which in turn impacts on learning and pupil attainment.



The grounded theory that has emerged from this study is:

**Where there was significant difference in attainment between academically able boys, boys' self-realisation of successful learning is being limited by an essentialist construction of gender, with gender stereotypical characteristics. Gender is constructed as being bipolar and with these two categories being mutually exclusive.**

In exploring the views of boys, the views of girls, teachers and parents were sought. These views taken together, and considering the theory generated, led to a number of recommendations, discussed above and summarised here.

#### *Recommendations*

##### *Policy:*

- Have a renewed focus on gender and attainment to include interrogating the differences between different ability groups of pupils, having a more nuanced approach to which boys and which girls.
- Raise the profile of gender in education rather than the focus on inclusion as an overarching category.

##### *Support and advice for schools:*

- Develop models of professional learning for teachers and educators, as well as others who are working with children and young people, that addresses issues such as gender at a fundamental and philosophical level, to deepen understanding about gender amongst teachers and others: to facilitate the development of programmes of learning for pupils that are gender sensitive, and programmes that develop thinking about gender as a concept and pupils' own self-concept of gender that is acceptant of a range of masculinities and femininities.
- Develop advice for teachers, as part of their professional learning, on the use of the type of qualitative methodologies used in this study.
- Develop advice on ways of working with parents to address gender issues, gender stereotyping and particularly gender duality.
- Raise the profile of 'learner voice' as a means of enhancing understanding of issues related to the lived-experiences of pupils to offer alternative solutions.

### **10.5 Learning transcending gender?**

If the recommendations outlined above were enacted, with evidence gathered to show impact in removing barriers that appear to be in place due to gender stereotypical responses to learning, there could be an opportunity to move to asking the question, “Can learning transcend gender?” Gender is embedded in our language and as such we need to acknowledge and explore the concept with all who are involved in a child’s learning. There must be a recognition, an understanding and an acceptance of gender diversity, with the range of masculinities and femininities that exist and for pupils to have a self-concept that is able to respond to the social context as a learner that is not influenced by preconceptions of how the gendered body is expected to behave. This is predicated on effective school and educational environments that are able to provide learning that is sensitive to gender. This could begin to change how society responds to gender. The proposal is not that gender is eradicated but that the barriers are eradicated. Only then can learning transcend gender. In more general terms, the question could equally be asked, “Can learning, attainment and achievement transcend social disadvantage or any other cause of barriers to learning because of diversity?”

## Appendix 1: School A's attainment data for S4 and S5 - 1999 to 2002

All candidates by the end of S4

\* 5+ means 5 or more qualifications gained at at particulat level or at a higher level in a subject.

Note: Statistics provided by STACs. The statistics shown to the right of Table 1.1 and in Table 1.2 below is further analysis carried out for this study

		5+* Level 3		5+ Level 4		5+ Level 5		raw number of pupils achieving 5 @level 5 or better	
Year	Roll	%	NCD	%	NCD	%	NCD		
2002		97	2	92	2	57	1		
2001		97	2	91	2	56	1		
2000		100	100	98	1	57	1		
1999		100	100	96	1	48	2		
<b>Males</b>									
		5+ Level 3		5+ Level 4		5+ Level 5		raw number of pupils achieving 5 @level 5 or better	Additional number of boys to reach the % gained by the girls*
Year	No of boys	%	NCD	%	NCD	%	NCD		
2002		98	2	92	2	47	2		
2001		97	2	91	2	49	1		
2000		100	100	97	1	53	1		
1999		100	100	96	1	44	2		
<b>Females</b>									
		5+ Level 3		5+ Level 4		5+ Level 5		raw number of pupils achieving 5 @level 5 or better	
Year	No of girls	%	NCD	%	NCD	%	NCD		
2002		96	4	93	2	69	1		
2001		96	4	92	2	64	1		
2000		100	100	99	1	60	1		
1999		100	100	96	1	51	2		

\*NCD: NCDs indicate where the school's value for a measure comes in a National Ranking. 1 Means in the top 10%, 2 the top 20% etc. Consider the situation however when a large number of schools achieve 100% for a measure. If there are more than 10% with such values it would not be reasonable to allocate NCD1. What is therefore done is to allocate an NCD of <100>. If there were, say, 20% of schools with a value of 100, then the next NCD a school could be allocated

\* Explanation: In 2002, if the boys had performed as well as the girls 69% of boys would have achieved 5+ Level 5. 69% of 95 boys is 66 boys, 21 more boys than had achieved 5+ Level 5.

The data in the table above have been redacted to comply with disclosure control specified by the Scottish Government's Education Analytical Services.

## Appendix 1 (cont)

All candidates by the end of S5

Note Level 6 is Higher

	5+ Level 3		5+ Level 4		5+ Level 5		1+ Level 6		3+ Level 6		5+ Level 6	
Year	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD
2002	97	2	93	2	71	1	66	1	41	1	23	1
2001	100	100	98	1	69	1	63	1	43	1	21	1
2000	100	100	96	1	64	1	70	1	44	1	17	2
1999	96	3	92	1	59	1	66	1	38	1	19	1

### Males

	5+ Level 3		5+ Level 4		5+ Level 5		1+ Level 6		3+ Level 6		5+ Level 6	
Year	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD
2002	99	2	94	1	63	1	64	1	36	1	19	1
2001	100	100	97	1	66	1	58	1	36	1	20	1
2000	100	100	96	1	63	1	69	1	37	1	13	2
1999	96	3	91	1	49	2	59	1	31	2	13	2

### Females

	5+ Level 3		5+ Level 4		5+ Level 5		1+ Level 6		3+ Level 6		5+ Level 6	
Year	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD
2002	96	4	92	3	80	1	69	1	47	1	27	1
2001	100	100	99	1	73	2	68	1	49	1	21	1
2000	100	100	96	1	66	2	70	1	51	1	20	2
1999	96	4	94	2	69	1	73	1	45	1	24	1

**Appendix 2: School A's attainment data for S4 and Higher for 2002 and 2003 respectively.**

**All candidates in S4**

2002	5+ Level 3		5+ Level 4		5+ Level 5	
	%	NCD	%	NCD	%	NCD
All candidates	97	2	92	2	57	1
Males	98	2	92	2	47	2
Females	96	4	93	2	69	1

**Note if females outperform males number is +**

2002	5+ Level 3		5+ Level 4		5+ Level 5	
	%		%		%	
Difference in % between males and females	-2		1		22	

**All candidates in S5**

2003	5+ Level 3		5+ Level 4		5+ Level 5		1+ Level 6		3+ Level 6		5+ Level 6	
	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD
All candidates in S5	98	2	93	2	68	1	62	1	40	1	22	1
Males	99	2	93	2	60	2	57	1	38	1	18	1
Females	96	4	93	2	78	1	69	1	43	2	26	1

**Note if females outperform males number is +**

2003	5+ Level 3		5+ Level 4		5+ Level 5		1+ Level 6		3+ Level 6		5+ Level 6	
	%		%		%		%		%		%	
Difference in % between males and females	-3		0		18		12		5		8	

### Appendix 3: School A's attainment data for S5 (at Higher level) -1999 to 2012

**All candidates by the end of S5**

**Note Level 6 is Higher**

	5+ Level 5		1+ Level 6		3+ Level 6		5+ Level 6	
<b>Year</b>	<b>%</b>	<b>NCD</b>	<b>%</b>	<b>NCD</b>	<b>%</b>	<b>NCD</b>	<b>%</b>	<b>NCD</b>
2012	80	1	77	1	55	1	<b>33</b>	1
2011	65	2	65	1	47	1	<b>30</b>	1
2010	69	1	66	1	49	1	<b>30</b>	1
2009	71	1	67	1	48	1	<b>30</b>	1
2008	73	1	66	1	46	1	<b>29</b>	1
2007	72	1	59	1	40	1	19	1
2006	71	1	63	1	42	1	22	1
2005	71	1	63	1	41	1	23	1
2004	67	1	62	1	44	1	20	1
2003	68	1	62	1	40	1	22	1
2002	71	1	66	1	41	1	23	1
2001	69	1	63	1	43	1	21	1
2000	64	1	70	1	44	1	17	2
1999	59	1	66	1	38	1	19	1

## Appendix 4: School A's attainment data for S4 and S5 - 1999 to 2012

### All candidates by the end of S4

		5+ Level 3		5+ Level 4		5+ Level 5		raw number of pupils achieving 5+ Level 5
Year	Roll	%	NCD	%	NCD	%	NCD	
2012		98	2	95	1	61	1	
2011		99	1	93	1	59	1	
2010		95	4	86	4	54	2	
2009		97	3	89	2	54	1	
2008		96	3	88	2	57	1	
2007		97	2	91	2	57	1	
2006		98	1	91	1	60	1	
2005		97	2	91	2	58	1	
2004		98	1	93	1	56	1	
2003		96	3	88	2	52	1	
2002		97	2	92	2	57	1	
2001		97	2	91	2	56	1	
2000		100	100	98	1	57	1	
1999		100	100	96	1	48	2	

### Males

		5+ Level 3		5+ Level 4		5+ Level 5		raw number of pupils achieving 5+ Level 5	Additional number of boys to reach the % gained by the girls at 5+ Level 5
Year	No of boys	%	NCD	%	NCD	%	NCD		
2012		99	2	93	2	54	1		
2011		99	2	94	1	57	1		
2010		96	3	85	3	43	2		
2009		98	2	91	2	48	2		
2008		98	2	91	1	53	1		
2007		99	2	91	2	54	1		
2006		97	2	89	2	54	1		
2005		97	2	90	2	54	1		
2004		99	1	93	1	48	2		
2003		99	2	90	1	49	1		
2002		98	2	92	2	47	2		
2001		97	2	91	2	49	1		
2000		100	100	97	1	53	1		
1999		100	100	96	1	44	2		

### Females

		5+ Level 3		5+ Level 4		5+ Level 5		raw number of pupils achieving 5+ Level 5
Year	No of girls	%	NCD	%	NCD	%	NCD	
2012		98	3	97	1	66	1	
2011		99	2	93	2	61	2	
2010		95	5	86	4	64	1	
2009		96	4	88	3	58	1	
2008		94	5	85	4	60	1	
2007		95	4	92	2	61	1	
2006		100	100	92	2	67	1	
2005		98	2	91	2	61	1	
2004		98	2	93	2	64	1	
2003		93	6	86	4	55	2	
2002		96	4	93	2	69	1	
2001		96	4	92	2	64	1	
2000		100	100	99	1	60	1	
1999		100	100	96	1	51	2	

### Difference in % between males and females

Note if females outperform males number is +

Year	5+ Level 3	5+ Level 4	5+ Level 5
2012	-1	4	12
2011	0	-1	4
2010	-1	1	21
2009	-2	-3	10
2008	-4	-6	7
2007	-4	1	7
2006	3	3	13
2005	1	1	7
2004	-1	0	16
2003	-6	-4	6
2002	-2	1	22
2001	-1	1	15
2000	0	2	7
1999	0	0	7

The data in the tables above have been redacted to comply with disclosure control specified by the Scottish Government's Education Analytical Services.

## Appendix 4 (cont)

All candidates by the end of S5

Note Level 6 is Higher

Year	5+ Level 3		5+ Level 4		5+ Level 5		1+ Level 6		3+ Level 6		5+ Level 6	
	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD
2012	100	100	95	1	80	1	77	1	55	1	33	1
2011	95	4	88	3	65	2	65	1	47	1	30	1
2010	98	2	91	2	69	1	66	1	49	1	30	1
2009	97	2	89	2	71	1	67	1	48	1	30	1
2008	98	2	92	2	73	1	66	1	46	1	29	1
2007	98	2	92	2	72	1	59	1	40	1	19	1
2006	97	2	91	2	71	1	63	1	42	1	22	1
2005	99	1	94	1	71	1	63	1	41	1	23	1
2004	97	2	90	2	67	1	62	1	44	1	20	1
2003	98	2	93	2	68	1	62	1	40	1	22	1
2002	97	2	93	2	71	1	66	1	41	1	23	1
2001	100	100	98	1	69	1	63	1	43	1	21	1
2000	100	100	96	1	64	1	70	1	44	1	17	2
1999	96	3	92	1	59	1	66	1	38	1	19	1

### Males

Year	5+ Level 3		5+ Level 4		5+ Level 5		1+ Level 6		3+ Level 6		5+ Level 6	
	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD
2012	100	100	96	1	73	1	71	1	51	1	29	1
2011	96	3	87	3	57	3	57	2	37	2	22	1
2010	100	100	94	1	64	2	61	1	45	1	24	1
2009	100	100	94	1	70	1	65	1	40	1	26	1
2008	100	100	93	1	73	1	68	1	42	1	21	1
2007	97	2	90	2	66	1	54	1	38	1	17	1
2006	97	3	90	2	73	1	61	1	40	1	21	1
2005	100	100	95	1	68	1	59	1	39	1	22	1
2004	101	100	93	1	63	1	60	1	40	1	20	1
2003	99	2	93	2	60	2	57	1	38	1	18	1
2002	99	2	94	1	63	1	64	1	36	1	19	1
2001	100	100	97	1	66	1	58	1	36	1	20	1
2000	100	100	96	1	63	1	69	1	37	1	13	2
1999	96	3	91	1	49	2	59	1	31	2	13	2

### Females

Year	5+ Level 3		5+ Level 4		5+ Level 5		1+ Level 6		3+ Level 6		5+ Level 6	
	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD	%	NCD
2012	100	100	95	2	86	1	82	1	59	1	36	1
2011	95	5	89	4	72	2	72	1	55	1	37	1
2010	96	4	89	3	73	1	70	1	51	1	34	1
2009	95	4	85	5	71	2	69	1	56	1	34	1
2008	95	4	92	2	74	1	63	1	49	1	37	1
2007	100	100	93	2	78	1	64	1	43	1	20	2
2006	98	3	93	2	68	2	65	1	44	1	23	1
2005	98	3	93	2	73	1	68	1	42	2	25	1
2004	93	6	86	5	71	2	65	1	48	1	19	2
2003	96	4	93	2	78	1	69	1	43	2	26	1
2002	96	4	92	3	80	1	69	1	47	1	27	1
2001	100	100	99	1	73	2	68	1	49	1	21	1
2000	100	100	96	1	66	2	70	1	51	1	20	2
1999	96	4	94	2	69	1	73	1	45	1	24	1

Difference in % between males and females

Note if females outperform males number is +

2012	0	-1	13	11	8	7
2011	-1	2	15	15	18	15
2010	-4	-5	9	9	6	10
2009	-5	-9	1	4	16	8
2008	-5	-1	1	-5	7	16
2007	3	3	12	10	5	3
2006	1	3	-5	4	4	2
2005	-2	-2	5	9	3	3
2004	-8	-7	8	5	8	-1
2003	-3	0	18	12	5	8
2002	-3	-2	17	5	11	8
2001	0	2	7	10	13	1
2000	0	0	3	1	14	7
1999	0	3	20	14	14	11



## Appendix 5: 2010 attainment data for School A's comparator school group and other high achieving mainstream secondary schools in Scotland (run by local authorities)

	S4						S5					
	5+ Level 5			1+ Level 6			3+ Level 6			5+ Level 6		
	Male	Female	Difference	Male	Female	Difference	Male	Female	Difference	Male	Female	Difference
* High School	43	63	20	61	70	9	45	51	6	24	34	10
* High School	56	64	8	68	72	4	46	61	15	27	41	14
* High School	57	60	3	71	74	3	49	54	5	25	33	8
* High School	38	41	3	40	49	9	23	34	11	15	22	7
* High School	63	72	9	65	66	1	45	48	3	28	21	-7
* High School	57	53	-4	54	79	25	32	49	17	15	21	6
* High School	42	69	27	64	67	3	39	44	5	22	26	4
* High School	36	67	31	48	72	24	26	50	24	13	17	4
* High School	46	63	17	55	63	8	39	44	5	16	18	2
* High School	37	57	20	62	72	10	43	55	12	23	24	1
* High School	29	49	20	39	44	5	18	14	-4	11	6	-5
* High School	41	51	10	43	38	-5	32	27	-5	13	15	2
* High School	57	46	-11	44	62	18	28	45	17	10	26	16
* High School	40	46	6	53	54	1	27	31	4	7	16	9
* High School	37	48	11	59	67	8	34	47	13	16	19	3
* High School	23	48	25	56	65	9	37	41	4	16	21	5
* High School	37	55	18	35	54	19	17	29	12	7	12	5
* High School	25	38	13	32	54	22	20	33	13	9	18	9
* High School	31	17	-14	58	54	-4	28	37	9	13	17	4
* High School	55	53	-2	49	51	2	32	39	7	16	15	-1
* High School	48	54	6	40	63	23	26	48	22	16	27	11
* High School	65	72	7	61	63	2	35	46	11	17	27	10
* High School	62	72	10	71	88	17	52	63	11	39	42	3
* High School	53	66	13	64	71	7	47	53	6	24	36	12
* High School	58	64	6	64	79	15	51	57	6	31	34	3
* High School	49	68	19	59	73	14	46	43	-3	25	18	-7
* High School	76	76	0	70	76	6	52	60	8	31	38	7
* High School	74	79	5	77	79	2	63	64	1	43	41	-2
* High School	60	86	26	78	86	8	62	76	14	40	53	13
* High School	61	69	8	70	60	-10	52	45	-7	23	27	4

**Note: where girls outperform boys the number is positive.**

Above the red line shows the comparator school group data for School A. Other schools achieving as well as or better than School A in 2010 have been included below the red line. The cells where the boys have the same or higher overall attainment are coloured green. There are other schools where the difference is small but overall the picture shows the extent of the lower performance of boys compared to girls in these high attaining schools with low disadvantage.

## Appendix 6: Test for statistical significance – t-test

To test for statistical significance, the value of t for each set of ‘measures’ (‘5+ Level 3’, ‘5+ Level 4’ etc.) was calculated. The t-test aims to tell whether the differences in the means are statistically different.

### *Research question:*

Is there a significant difference in the mean attainment for males and females in S4 and S5 at the different levels of challenge presented by the external examinations set by the SQA?

The ‘measures’ tested were:

- S4 - 5 or more passes at level 3 or better (‘5+ Level 3’)
- 5 or more passes at level 4 or better (‘5+ Level 4’)
- 5 or more passes at level 5 or better (‘5+ Level 5’)
- S5 - 1 or more Highers (‘1+ Level 6’)
- 3 or more Highers (‘3+ Level 6’)
- 5 or more Highers (‘5+ Level 6’)

T-tests have been carried out for different periods of time as shown below and relate to the discussions in Chapter 2.

### *Null hypothesis:*

There is no difference between the mean attainment of males and females

### *Assumptions:*

Equal variance, i.e. the variability of scores, are similar (This has been computed for all of the sets of results and is true)

Alpha value of 0.05

The t-test is two tailed

The equation used to calculate the t value for each set of results:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

degree of freedom,  $df = n_1 + n_2 - 2$

In the calculations here the sample size,  $n_1 = n_2$

### **1999 to 2002**

Year group	Measure	Calculated t value	Table t value	Significant?
S4	5+ Level 3	-0.545	2.447	No
S4	5+ Level 4	0.463	2.447	No
S4	5+ Level 5	3.000	2.447	Yes
S5	1+ Level 6	2.724	2.447	Yes
S5	3+ Level 6	6.949	2.447	Yes
S5	5+ Level 6	2.741	2.447	Yes

Alpha 0.05

Df 6

**2008 to 2012**

Year group	Measure	Calculated t value	Table t value	Significant?
S4	5+ Level 3	-2.085	2.306	No
S4	5+ Level 4	-0.363	2.306	No
S4	5+ Level 5	3.785	2.306	Yes
S5	1+ Level 6	1.716	2.306	No
S5	3+ Level 6	3.687	2.306	Yes
S5	5+ Level 6	7.055	2.306	Yes

Alpha 0.05

Df 8

**1999 to 2012**

Year group	Measure	Calculated t value	Table t value	Significant?
S4	5+ Level 3	-2.110	2.056	Yes (boys performing better than girls)
S4	5+ Level 4	0	2.056	No
S4	5+ Level 5	6.464	2.056	Yes
S5	1+ Level 6	4.610	2.056	Yes
S5	3+ Level 6	5.021	2.056	Yes
S5	5+ Level 6	3.223	2.056	Yes

Alpha 0.05

Df 26

## **Appendix 7: Literature review methodology**

This thesis focuses on activity within Scottish schools, but the literature search was not restricted to Scotland or the UK but drew more widely from English speaking nations and some European countries to look for any evidence that would be pertinent to this study.

Initially an advanced search was made of the literature in the University of Glasgow library using the keywords: **gender OR boys AND education AND attainment OR achievement OR underachievement**, and on Proquest. The databases accessed with results were: BEI, AEI, ERIC, ASSIA, BHI, IBSS, LISA, LLBA, Proquest dissertations and theses A and I, sociological abstracts, and worldwide political science abstracts.

The books reviewed were limited to those published after and including 1996. The rationale for this date was the extensive review carried out by Powney (1996) on gender and attainment in Scottish schools. Some of the seminal works pre-1996 on gender equality in an educational setting have also been sourced, for example Mac an Ghaill (1994), and other research mentioned in texts, but no attempt was made to do a forensic review of the literature before this date with more focus on recent works.

In deciding on a cut-off date for journal articles, cognisance was taken of the review of literature carried out by Forde *et al.* (2006). The search produced about 8000 articles, which was reduced to approximately 3500 when restricted to the period 1 January 2005 to 15 November 2015. An iterative search was then undertaken with relevant search words to seek those of most relevance: discourse of gender and underachievement, and then on gendered patterns of attainment amongst /academically able pupils.

The internet and grey literature were also a useful source of material.

Literature continued to be sought during the writing of the thesis.

Appendix 8: The comparative analysis of ten key studies (1996 to 2008)

Author	Study methodology	Year	Country Main country with other countries studied in brackets)	Commissioned by	Academically 'able' focus?	Factors/Explanations (factors described are findings from the review/studies from school visits/case studies)	Strategies	Gender construction considered?	Outcomes (measured impact)
Powney	Literature review	1996	Scotland (UK)	SOEID	No	Assessment issues: boys and girls being different in how they approach assessments ... teachers' expectations and responses to boys and girls, hence boys' and girls' perceptions of subjects ... societal factors ... intersectionality between social and educational factors	NOTE: this review was carried out 20 years ago when the research in this area was limited. <i>Strategies proposed</i> : investigate learning styles, peer support, peer pressure and role models that could have an influence on learning ... school policy on subject choice and access to different subjects ... learning and teaching that promotes positive attitudes	Recognition of impact of society, cultures and subcultures have on gender	This paper did not set out to give a measure of impact.
Sukhnandan <i>et al.</i> 264	Phase 1 – literature review and review of strategies used in schools (response from 97 LAs)	1999	England and Wales	NFER carried out as part of the Local Government Association research programme	No	<b>Literature review: School-related factors and out-of-school factors</b> <i>School-related</i> : type of assessment ... teachers' gender values and expectations, and response to boys' behaviour ... boys' negative attitude to school and learning ... <i>Out-of-school</i> : socialization... <b>Schools' review (secondary)</b> : staff training ... roll modeling /mentoring ...single-sex groupings	Different teaching methods and classroom organization ... teacher/pupil relationships - raising staff awareness ... culture to improve negative attitude ... role modeling /mentoring		
Sukhnandan <i>et al.</i>	Phase 2 school based study	2000	England and Wales	NFER	No but there were pupils selected for targeting who were mainly	See above	Single-sex classes ... mentoring ... additional literacy support. NOTE: Strategies continually modified based on evidence	Raised the issue of potential for gender-stereotyping e.g. focusing on texts for boys and male	Not found easy to measure the impact of strategies. Recommended research to give

## Appendix 8: The comparative analysis of ten key studies (1996 to 2008)

Tinklin <i>et al.</i>	Literature review ... school based approaches to addressing gender difference – all LAs approached – questionnaires and interviews and 6 case studies (secondary) interviews with staff and focus groups of pupils, questionnaires to parents	2001	Scotland	SEED	boys on the borderline of going below a specific category including five or more A – C GCSE (more able)	Maturity ... behaviour ... peer pressure ... literacy ... different learning styles ... choice of subjects - gender related ... cultural and environmental factors shaping aspiration and ambition ... types of assessment	gathered: staff not expecting 'quick-fixes'. Each school in the case study selected those strategies that they considered would give greatest gain based on preliminary investigation, which accords with the notion of addressing local context and culture.	role models. Concern about the possibility of the focus being only on boys and not addressing the issue of underachievement amongst some girls – equal opportunities compromised.	more accurate ideas for potential solutions
265							Awareness of complexity of the range of factors and hence need for a range of strategies matched to local context: Raising awareness about gender ... policy at whole school level ... networking opportunities for teachers ... involving pupils and parents ... behaviour policy ... learning and teaching to match needs ... literacy strategy ... countering peer pressure ... targeting support	Promoting 'gender jigsaw' – not seeing boys and girls as homogeneous groups – 'which boys?': 'which girls?': approach ... consider intersectionality of class/gender ...	Robust evaluation not possible because of the limited timescale (1 year) and absence of data at individual pupil level Recommended: seek pupils' views and use to inform strategy
Ofsted	Literature review and school surveys	2003	England	Ofsted	x	Positive learning environment ... good pedagogical practice ... individual monitoring of learning ... support for learning	Promoting high standards including clear behaviour expectations ... strong learning culture ... formative assessment ... learning styles ... practical activities ... literacy focus ... vocational work-based learning ... single sex groupings	Polarised view of boys and girls – boys having certain attributes – no consideration of 'which boys?' and 'which girls?'	Strategies suggested but no data to show impact long term
Younger and Warrington	4 year project (2000 – 2004) Literature review ... range of case study schools working in triads –	2005	England	DFES support	14 -16 year olds Different ability and social classes	Learning and teaching approaches and environment for learning ... behaviour ... self-worth	NB advocating integration of strategies Learning styles (NB different learning styles used together)	'Which boys?' and 'Which girls?' approach and recognising boys	Impact varied within schools – e.g. mentoring was successful when it

**Appendix 8: The comparative analysis of ten key studies (1996 to 2008)**

	including interviews with girls and boys: individual and groups, teachers				... peer pressure - displaying masculinity that is counter to school ethos	providing stimulating and engaging learning) ... Target setting and mentoring (NB not only focusing on those at the borderlines) ... single sex classes (NB care not to reinforce stereotypes) ... positive culture and ethos to reduce 'laddish' behaviour ... Collaborative working between schools ... sharing practice ... leadership support ... staff commitment ... high expectations ... emphasis on learning and teaching (NB 'boy' friendly pedagogies not advocated)	not a homogeneous group	was not focused on only those on the borderlines and fitted with the school ethos and was founded on relationships ... single sex classes mixed impact – some success for very focused groupings ... strategies can be successful but not a short term fix.
Forde <i>et al.</i>	Literature review	2006	Scotland	Scottish Executive	No	Boys respond differently to learning and teaching and to school ... boys not finding it as easy to succeed in school ... poorer literacy skills ... gender construction - both through social and cultural influences beginning in early family life experiences and influenced by the social and cultural environment of the school ... negative behaviour, attitude and motivation towards schoolwork ... peer group pressure not valuing learning ... teachers' expectations of boys ...	<p><b>Learning, teaching and assessment approaches</b> that are 'gender sensitive' encompassing a range of learning styles and not adopting a gender stereotypical stance ... raising awareness with teachers of being sensitive to gender including how to respond to those exhibiting gender stereotypical behaviour ... <b>classroom organization:</b> singles sex groupings/classes only where evidence suggests that they will be beneficial ... <b>whole school policy</b> ... intelligent use of a range of data by gender for improvement ... staff awareness raising ... care with option/career choice advice to avoid stereotyping</p> <p><i>Failure of strategies:</i> where masculinities and femininities are not recognised with boys seen as a homogeneous group, and not giving boys the opportunities to think about the range of masculinities ... not considering intersectionality between gender and class</p>	

## Appendix 8: The comparative analysis of ten key studies (1996 to 2008)

Condie <i>et al.</i>	Literature review based on Forde <i>et al.</i> (2006), evidence from LAs (Scotland) on gender related policies and practice, and case studies in schools – seeking views of pupils, parents and teachers including senior management team on some specific strategies	2006	Scotland	Scottish Executive	No but one school did look at streaming by ability (only one of the case study secondary school was not in an area of disadvantage)	See Forde <i>et al.</i> below for factors identified from literature review	Range of strategies listed by LAs including focus on learning, teaching and curriculum flexibility, single sex groups, use of data for interventions and monitoring, literacy, mentoring and parental engagement. Strategies trialed in case studies (secondary): progression and continuity cross sector (primary and secondary), single sex classes, curriculum flexibility, streaming by ability to build self esteem for able.	Gender construction and identity raised in the literature review – see Forde <i>et al.</i> (2006) but responses from staff give little evidence of this being a consideration. Although it was reported that a few staff had been on staff development course about gender but not specifically mentioned if this included the conceptualization of gender.	Not able to show improvement in attainment because of the short time scale of the projects.
Skelton <i>et al.</i>	Literature review	2007	England	EOC	No but evidence that hegemonic masculine behaviour and anti-learning culture is also seen amongst middle class boys	Dichotomous gender construction/identity reinforced by peer group pressure – behaviour, disengagement from learning...literacy ...boys opting for stereotypical subject choices perceived as more demanding (STEM subjects) ... advised career choices that are gender stereotypical. NOTE: explanations of boys and girls being different, boys and girls having different learning styles, feminization of schools, gender biased assessment practice are challenged based on evidence (p. v)	Whole school approaches (cited Warrington <i>et al.</i> , 2005) ... focus on a range of learning styles to meet individual need and not taking a polar gendered response ... single sex classes but only for carefully planned reasons ... changing ideas about gender from a stereotypical stance ... .. changing perceptions about subjects being for boys or girls ... Holistic approach with both teachers being aware of and countering gender stereotyping and challenging pupils to think differently underpinned by a whole school ethos, strong leadership. Relationships	Set in the context of GED. Strong emphasis on gender construction and identity. Considering the underachievement of girls as well as boys ... recognising 'Which boys?' and 'Which girls?' Intersectionality of gender/class and ethnicity	Not sustained or consistent when strategies reinforce gender difference. Some examples of impact when gender construction addressed.



**Appendix 8: The comparative analysis of ten key studies (1996 to 2008)**

Report: 'Boys Getting It Right', (2002), 'Boys' Education Lighthouse Schools' (BELS) Program (2003-2005) followed by 'Success for Boys' programme	'Boys Getting It Right': invited submissions from parent/education/ relevant industry organisations and research bodies ...BELS programme: Literature review, BELS and 'Success for Boys' evaluation: literature review, consultation with teachers, school leaders, and other key stakeholders, site visits to schools in the programme, surveys of teachers, school leaders, professional learning consultants.	2003 to 2008 - (evaluated in 2008)	Australia	Australian Government	No	'Boys Getting It Right': curriculum, pedagogy including learning styles, assessment; subject choice; literacy; student/teacher relationships; behaviour management; appropriate male role models in schools; school culture. BELS and 'Success for Boys': identified through the 'Boys Getting It Right' programme	and classroom teaching practices NB Individual strategies or range of without challenging gender essentialism <i>Boys Getting It Right</i> : Developing and maintaining positive pupil/teacher relationships and quality, motivational learning and teaching, positive school culture that fosters positive peer relationships e.g. mentoring programmes ... effective teacher training programmes that equip teachers with the skills to meet the needs of boys and girls, targeting programmes for boys, and emphasise the importance of relationships <i>BELS and 'Success for Boys'</i> : programme of <b>professional learning for teachers</b> : framework to approach boys' education developing their knowledge and understanding of concepts linked to boys' learning. <b>School professional learning</b> : planning and implementing change; action research at classroom level. Provision of a range of information and resources to support teachers in improving boys' outcomes and engagement with learning.	'Boys Getting It Right': a focus on boys with apparent dichotomous approaches but one reference to recognising that not all boys are failing. No mention of gender construction except in the context of effective male teachers needing to aware of gender construction rather than simply being male. <i>BELS and 'Success for Boys'</i> : gender construction raised when discussing indigenous boys. The literature review for the evaluation did raise the issue of identity and 'which boys?' and stressed the diversity of masculinities.	'Boys Getting It Right': preliminary report – no impact expected but evidence from submissions for the report gave strategies that were proving successful. <i>BELS and 'Success for Boys'</i> : Programme built capacity amongst teachers and leaders to address concerns about boys' education; improved pupil engagement. Evidence of improved pupils' outcomes not robust because of the limited quantitative data
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## Appendix 8: The comparative analysis of ten key studies (1996 to 2008)

Estyn	Literature review and analysis of inspection findings (600 schools) and specific visits to schools (11 secondary)	2008	Wales	Welsh Government	Considering 5 or more GCSE grades at A* to C	Behaviour ...literacy ...negative peer pressure ...boys not as adaptable as girls ...poor attitude to learning ...	Raising the attainment of <b>all</b> pupils ...whole school policies and practice including developing boys' positive attitude to learning ...learning and teaching approaches that are not gender stereotypical – learner centred, active, using ICT...learning and assessment tailored for boys ...literacy programmes ...high standards for behaviour ... mentoring and target setting (building self-worth and involving boys in discussing their own learning) ... challenging masculinity that is anti-learning ... use a wide range of data for analysis	Recognising boys are not a homogeneous group ...	Strategies recommended were based on evidence of impact in a small number of schools. As at the time of this report few schools had policies or strategies to address the issue or of success in tackling gendered patterns of underachievement. No mention of how this has been translated into success elsewhere.
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All focus on secondary schools or information extracted from reports related to secondary

## Appendix 9: Sample of Consent Form and Plain Language Statement



### Plain Language Statement

#### 1. Study title and Researcher Details

An investigation into factors which limit or facilitate boys' attainment in secondary education.

**This research is being carried out by Mrs Corry, former Head Teacher of Balforn High School (01360 440469)**

#### 2. Invitation paragraph

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask Mr MacKay if there is anything that is not clear or if you would like more information. You can also ask me any questions if you agree to take part. Take time to decide whether or not you wish to be involved.

Thank you for reading this.

**Mrs Corry**

#### 3. What is the purpose of the study?

To try to find what supports boys in their learning and what may be a barrier. What is found out from this study may lead to some recommendations for teachers and schools in the future to improve boys' achievement.

#### 4. Why have I been chosen?

You are in the group of young people who are/were in the Standard Grade Credit /Intermediate 2/ Group in S4 or high achieving Higher group in S5 and I would like to ask you about your learning and achievement. I have already interviewed 16 boys individually. I would like to interview some groups of boys and girls from different year groups to see what they think limits and helps learning and achievement.

#### 5. Do I have to take part?

You do not have to take part if you do not want to. It is voluntary and if you do agree to take part in an interview you can ask to leave the interview at any time.

#### 6. What will happen to me if I take part?

You will be part of a small single sex group of about 5 young people in the same year group. As a group you will be asked between 3 and 5 questions to find out what you think helps you learn, what you think makes it difficult to learn, and any ideas you have to improve learning. The interview will be taped if you agree and I will take some notes when you are talking. The interview will take place in the Lower Conference Room or one of the bases in the school and will last for no more than 30 minutes.

#### 7. Will my taking part in this study be kept confidential?

Your taking part in this study will be kept confidential. If there is anything you have said that I would like to use in anything that I write, your name will not be mentioned. You will be identified by a number and any information about you will have your name and address removed so that you cannot be recognised from it. You will not be identified in any report/publication.

## Appendix 9 (cont)

### 8. What will happen to the results of the research study?

When all the interviews have been completed, then I will try to find out if there is anything that I could recommend to improve boys' achievement in SQA examinations. This will be written up as a report called a thesis. This will be available in about 5 years' time. I will give you a short summary of what I have found and a link to where you can find the whole report.

### 9. Who is organising and funding the research? (If relevant)

This research is being self-funded.

### 10. Who has reviewed the study?

A professor called Professor Forde from Glasgow University.

### 11. Contact for Further Information

If you want further information, you can contact

Mrs Val Corry  
[v.corry.1@research.gla.ac.uk](mailto:v.corry.1@research.gla.ac.uk)

OR

Professor Christine Forde,  
Chair of Leadership and Professional Learning  
School of Education  
College of Social Sciences  
University of Glasgow  
St Andrew's Building  
11 Eldon Street  
Glasgow G3 6NH  
+44 (0)141 3303010/3303427

If you have any concerns regarding the conduct of the research project that you can contact the College of Social Sciences Ethics Officer by contacting Professor John McKernan at  
[John.McKernan@glasgow.ac.uk](mailto:John.McKernan@glasgow.ac.uk)



## Consent Form

Title of Project: **An investigation into factors which limit or facilitate boys' attainment in secondary education.**

Name of Researcher: Mrs Val Corry

- 1) I confirm that I have read and understand the Plain Language Statement for the above study and have had the opportunity to ask questions.
- 2) I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.
- 3) I give consent to interviews being audio-taped.
- 4) I understand that whatever I say in the interview is confidential.
- 5) I understand that my name will not be mentioned in any reports or publication based on this research. If anything that I have said is mentioned a pseudonym will be used: no one will know it was me who said it.
- 6) I understand that whatever I say will have no impact on me at all e.g. my relationship with the Head Teacher or any of my teachers.
- 7) I agree / do not agree (delete as applicable) to take part in the above study.

Name of Participant	Date	Signature
_____	_____	_____

Name of Person giving consent (if different from participant, eg Parent, Carer)	Date	Signature
_____	_____	_____

Researcher	Date	Signature
_____	_____	_____

## Appendix 10: Explanation of the process of coding, conceptualisation and categorisation of the data (illustrated in Fig. 7.1)

1. Individual boys in School A were the first to be interviewed. The interviews were audio-recorded and notes taken. Points of interest or potential concepts were noted for exploring in subsequent interviews. As soon as possible following the interview, the interview was transcribed from the audio recording. Notes or ‘memos’ taken during the interview were added to the transcript where relevant.
2. The transcripts were coded line-by-line.

An extract from a transcript is shown below. To illustrate the process, one code relating to the quality of the teacher, arising from scrutiny of the data has been highlighted.

### B6 School A

*What do you do out of school?* Active practical things - football team - friends.

*What helps you learn?* Depends on the subject. I like sociology and modern studies. Appeal to me and I do well in them. I like the content and the issues. I like teacher – I enjoy it more. I like the teacher when can have banter and have a good relationship ... relaxed, not strict and it is easier when it is not tense. I did not enjoy theory in PE. I like running around not sitting at a desk. I like metalwork in S5.

I like it when can talk to people. In Maths you are on your own. English – I enjoyed it last year. Some of the texts did not appeal to me. I got an A in Higher English. I got to talk to people in English - group work and paired. It isn’t necessarily about working with other people but the atmosphere is relaxed.

I sometimes lack motivation. When I don’t enjoy ... I cannot be bothered doing it. Not this year because I have chosen the subjects I like doing. Content ... when not going to use it later on in life. I knew general direction and so some subjects did not do well e.g. Bio because I knew I was not going to use Bio.

### Coding

Doing active, practical activities.  
Playing football.  
Being with friends

Enjoying certain subjects eg sociology and modern studies – appealing and doing well here  
Liking the teacher: learning more enjoyable  
Having a good relationship with the teacher that is relaxed  
Easier (learning?) when it (classroom environment?) not tense  
Not enjoyed PE theory  
Enjoying being active

Enjoying learning when can talk to others eg English gained an A in H English even though texts did not appeal  
Working in groups and paired work (in English)  
Not just about working with other people – groupwork created a relaxed atmosphere

When not motivated, not enjoying learning and cannot be bothered  
In S6 enjoying learning because doing subjects like doing  
Not done so well in subjects that not going to use later

3. As the interviews proceeded, any emerging patterns (grouping of codes) emerging were noted. For example, there were several codes linked to the quality of the teacher having a positive impact on learning, including the point marked above.
4. From continual scrutiny of the codes and patterns, concepts were identified. In the example given above, the code ‘liking the teacher, learning enjoyable’ was assigned to the concept of ‘quality of the teacher’.
5. Concepts were studied and were able to be grouped into three categories: ‘self-awareness of effective learning’; ‘self-awareness of barriers to learning’;

## Appendix 10 (cont)

and ‘perception of gender identity’.

6. After all individual boys had been interviewed the list of concepts emerging for the three categories, including ‘quality of the teacher’ are show below:

	<b>Self-awareness of effective learning</b>
	Enjoyment of learning
	Engaging learning methodology
	Relevance of learning
→	Quality of the teacher
	Understanding the importance of studying
	Willingness to seek help from others – peers and family members
	Competitiveness
	Maturity

<b>Self-awareness of barriers to learning</b>
Learning methodology
The teacher
Assessment
Lack of understanding
Literacy
Dislike of a subject
Distractions
Lack of motivation
Disruptive behaviour
Peer pressure

<b>Perception of gender identity</b>
Binary view of gender influencing perception of learner identity

7. Three spreadsheets were set up, one for each of the three categories. The spreadsheet was populated with the relevant concepts. At this stage, as a first attempt to synthesise all of the data, each code from each interview was placed in the relevant provisional category sheet under the most appropriate concept. Some codes appeared more than once because they matched with more than one concept. An attempt was made to minimise this duplication but it was not avoided totally because of the nature of the views expressed and the concepts identified. Where the same code was linked to several participants these points were condensed. For example, one code that linked to several participants was ‘learning through activity’ (B1, B8 B5 B6 B3 B15 B16 B4 B12). (The codes in brackets referred to the individual boys as shown in table 8.1.) However most of the codes were not condensed, with each attributed to a single participant in the spreadsheet because of the nature of the codes. The code linked to each participant was included for ever



## Appendix 10 (cont)

code because this made it possible to refer back to the interview for that participant if there was a need to look again at what had actually been voiced.

Some of the coding was illustrative rather than analytical as explained in section 7.2.1 in the *description* section. There were a very small number of points made that were initially not seen as relevant and did not appear to ‘fit’. These were placed in a category of ‘no concept’ and kept for future scrutiny.

An extract from the spreadsheet for ‘**self-awareness of effective learning**’ is shown below. The example of the code, ‘liking the teacher: learning more enjoyable’ (B6) is marked and shown under the concept of ‘quality of the teacher’

Concept	Code
Quality of teacher	effective teaching/teacher <b>B8 B1, B14 ... B11 B16 B18 ... B13 ...</b>
	teacher makes a difference <b>B9 ...B3 ...</b>
	Teachers helping you aids learning <b>B17</b>
→	Liking the teacher: learning more enjoyable <b>B6</b>
	Teacher important dependent on the subject Suggesting that liking the teacher Leads to better performance. S6 better relationships with teachers - treated more like an adult <b>B6</b>
	Having a teacher that is passionate about learning who is encouraging and makes learning enjoyable <b>B2</b>
	Having good relationships with teachers. Enjoying MS because teacher personalizing support with learning <b>B10</b>
	Able to seek teacher's help <b>B10</b>
	Trusting teacher in English <b>B14</b> Producing good work in English. <b>B14</b>
	Feeling free from stress and pressure <b>B14</b>
	Coping with deadlines <b>B14</b>
	Teacher giving pupils learning environment conducive to learning <b>B14 ...</b>
	Effective teachers engaging with pupils with their learning and personally. Having good relationships between pupil and teacher <b>B14</b>
	Teacher's personality has big impact. Good to have different types of teachers <b>B14</b>
	Learning better with a good teacher giving effective feedback and steps for improvement <b>B7</b>
	Having good relationship with teacher improves learning <b>B7</b>
	Valuing teachers who explains what is being written <b>B18</b>

An extract from the spreadsheet ‘**perception of gender identity**’ is shown below:

Concept	Code
	<b>Individual boys School A Perception of gender</b>
Binary view of gender influencing perception of learner identity	voicing gender difference <b>B5... x3, B8...B1...</b>
	boys less concerned about performance <b>B5</b>
	Perceiving that teachers know that girls are going to perform better than boys <b>B9</b>
	Girls more focused in class: on their learning <b>B9</b>
	Perceiving that boys want to have fun and girls more organized, have all the notes, which allows them to be better prepared for revising <b>B17</b>
	Did more work in an all boys class in S2 in ML <b>B17</b>
	Perceiving that boys understand each other better and their learning (with reference to single sex class <b>B17</b> - no boys distracted each other in the single sex class <b>B17</b> )
	Perceiving that girls do more work at home than boys when revising for tests <b>B17</b>
	Perceiving that girls have different personalities. Girls seeming to do more homework. Boys not keen to be seen as doing well by the teacher
	Boys more likely to misbehave. Not knowing the teacher boys more likely to play up. Girls can also have this trait of ‘playing up’ <b>B6</b>
	Girls more organized than boys. Boys more sport focused.
	Boys concentrating less on what they are thinking - thinking of other things <b>B2</b>
	Perceiving girls are more organized
	Boys like being with friends <b>B3</b>
	No view on differences between boys and girls – assuming different learning styles <b>B10</b>
	Perceiving that girls are more ‘delicate’ <b>B14</b>
	Way children are brought up makes a difference
	Girls – different personalities <b>B14</b>
	Boys greater affinity for use of technology <b>B11</b>
	Perceiving girls study over a longer period of time before an exam <b>B11</b>
	Perceiving that girls are diligent and do not misbehave and complete work quickly in contrast to boys who ‘muck about’ but still work <b>B15</b>
	Perceiving that girls are more sensible <b>B15</b>
	Questioning whether revision is ‘manly’ <b>B7</b>



## Appendix 10 (cont)

8. All the boys' interviews in School A were completed and analysed before beginning the round of interviews with the other participants in School A. Similarly, all of the interviews from School A were analysed before interviewing those in School B and C. All of the interviews were completed and analysed using the same method: audio recording/note taking; accurate transcription; line-by-line coding of each transcript; scrutiny for patterns/concepts and categories; creating of spreadsheets to sort the codes into concepts and categories. An extract from a transcript of one of the interviews from School C (BC5) is shown below with the notes about the interview (memo) noted in ***bold italics***:

### S5 Boys (BC5) School C

### Coding

*The boys in this interview were reasonably forthcoming but there was some hesitancy and sometimes limited responses and prompts had to be used. There was an attempt to develop a conversation and this led to more expanded responses. The diction of one of the boys made it difficult to pick up every word. Another boy was not as fluent with broken sentences. This has been indicated by \_ and where there was lack of clarity this has been shown as (not clear). What each new speaker said was captured. However, no attempt was made to differentiate one speaker from the next but an indication was given when a new speaker began. There was very little in the way of more than one person speaking at once. There were a very few occasions where there was interruption and this has been indicated. There was no disagreement among the group of points made. There was accord.*

*What do you feel helps you, facilitates your learning, influences your learning to be positive? Especially with boys, I think there seems to be quite a significant amount of competition between people in terms of academic results. I think that is highly beneficial because the competition helps people strive to become better and I think that's why particularly in boys it does seem to help learning significantly.*

Competition between boys in terms of academic results – beneficial because helps to become better

*So how did that sense of competition, particularly academic results come about or has it always been here? Lots of class tests built it up. New speaker: Yes. It has always been there. Certainly in secondary school.*

Competition - because of many class tests

9. A workbook containing all the spreadsheets was created to allow easy inspection of the codes and concepts.
10. Following the completion of all the spreadsheets for all the interviews, the concepts arising from the analysis of the boys' views in School A were compared to the concepts arising from the rest of the interviews. This process developed thinking about the concepts assigned to the boys' views and an amended list of concepts was created. This process included concepts being linked (*axial coding*), with some concepts being reassigned as properties.
11. For example, the final list of concepts for the boys' interviews (School A) for the category '**Self-awareness of effective learning**' was:

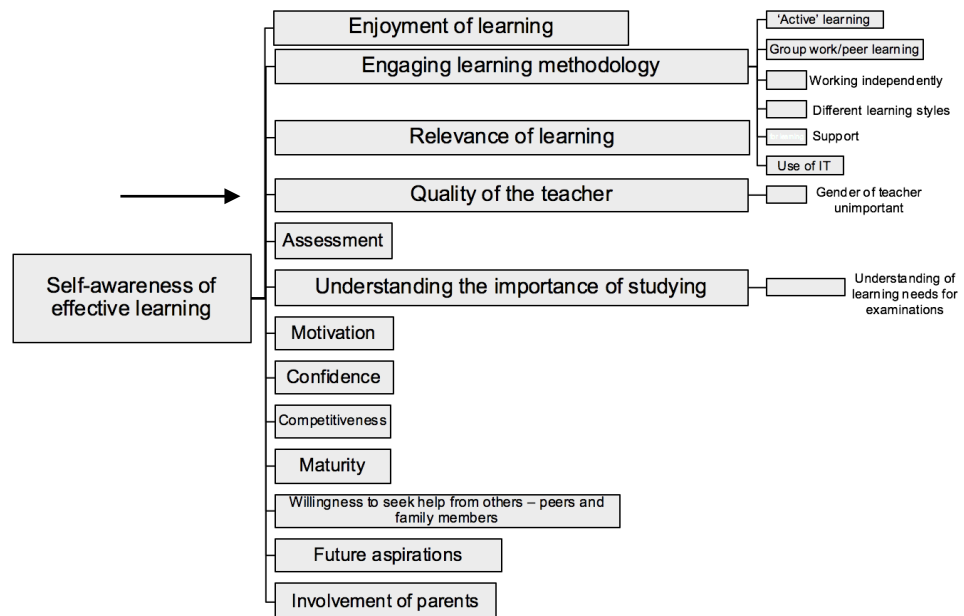
### Appendix 10 (cont)

Category	Concepts/ properties of the category	Concepts/property of the concept in the column to the left
<b>Self-awareness of effective learning</b>           →	Enjoyment of learning	
	Engaging learning methodology	Active learning Groupwork/peer learning Working independently Different learning styles Support for learning Use of IT
	Relevance	
	Quality of the teacher	Gender of the teacher unimportant
	Assessment methods	
	Understanding the importance of studying	Understanding of learning needs for examinations
	Motivation	
	Confidence	
	Competitiveness	
	Maturity	
	Willingness to seek help from others – peers and family members	
	Having future aspirations	
	Involvement of parents	

12. The next part of the process was to illustrate the concepts diagrammatically. Draft diagrams were created to give a pictorial representation of the concepts linked to each group of participants, in order to illustrate the categorisation and conceptualisation of the data. These diagrams developed into ‘conceptual maps’ as they were refined, with the concepts and properties linked to these concepts shown as boxes. Some of the initial concepts became properties of the higher level concepts, for example ‘groupwork/peer learning’ and ‘active’ learning’ became properties of ‘engaging learning methodology’; ‘gender of the teacher unimportant’ became a property of the concept ‘quality of the teacher’, as indicated in the table above. The conceptual map shown in Diagram 8.2 is reproduced here by way of illustration.

## Appendix 10 (cont)

**Diagram 8.2: Category: ‘Self-awareness of effective learning’:- individual boys**



13. Dimensions were added to the map of concepts, by sizing the concept boxes, to illustrate the frequency and potential importance of the provisional concepts. The size and length of the boxes in the diagrams are meant to be impressionistic. To size or scale the boxes each concept was examined, e.g. ‘quality of the teacher’ and the number of *respondents* who had an initial coding associated with this concept was noted to give the total number of respondents for each category.

The following table shows the rationale used for scaling the boxes in the diagram for the individual boys. NOTE: the range for each scale was arbitrary with the scaling divided into four as shown in the table below.

### Scaling of concepts in concept diagrams for individual boys in School A

Percentage of pupils assigned to a code in a category	Approximately 1 to 25%	Approximately 25% to 50%	Approximately 50% to 75%	Approximately 75% to 100%
Number of pupils, x, alluding to this concept	$1 \leq x \leq 4$	$5 \leq x \leq 9$	$10 \leq x \leq 13$	$14 \leq x \leq 18$
Relative size of the boxes in the diagram	1	2	3	4

## Appendix 10 (cont)

For example: In the final diagram for individual boys shown in diagram 8.2 the box sizes were:



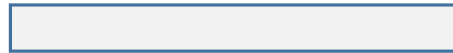
Box size of 1: e.g. 'motivation';



Box size of 2: e.g. 'future aspirations';



Box size of 3: e.g. 'enjoyment of learning';



Box size of 4: e.g. 'quality of the teacher'.

A similar method was used for the properties to show relative frequency of their being mentioned e.g. 'groupwork/peer learning' was mentioned more than 'different learning styles'. In this case the sizing of the boxes was less reliable because of the smaller number of times they were mentioned but serves to illustrate relative frequency.

14. A similar method to that described above was used for the other interviews carried out although with fewer interviews being carried out for all the other groups, apart from the teachers. The scaling was done by considering the number of respondents; an impression using professional judgement through inspection of importance compared to the rest of the concepts; and the quality of the responses about a particular concept. The scaling in the rest of the interviews is less valid or reliable. An extract showing how the dimensions were arrived at for the focus groups of pupils in the schools is shown below:

## Appendix 10 (cont)

This sheet shows the dimensions assigned to the concepts. These were based on the number of responses and by inspection using judgement.

Category list for focus groups	Boys A	Girls A	Boys B	Girls B	Boys C	Girls C
<b>Self-awareness of effective learning</b>						
Enjoyment of being in school						
enjoyment of learning	2	2	1	1	1	1
Having an active life out of school - gainfully employed						
Relevance of learning to student	3	2	1	1	1	1
Qualifying engaging learning methodology	4	4	4	3	4	3
	Active learning (2)	Group work (1) Different learning activities (1)	direct teaching	independent learning different learning styles/activities	different learning styles pace	support for learning different learning styles/activities
Quality of teacher	4	4	1	1	2	1
Use of IT aids learning						1
No gender preference of teacher	✓	✓		✓		
View on assessment	1	1				
Reporting no gender bias on part of teacher						
Perception of what learning for exams entails	2	2	1	1		1
Understanding the importance of studying	3	3	1	1	2	2
Willingness to accept help from others with learning other than teacher (out of school)		1		1	1	1
Importance of literacy						
Competitiveness		1	1	1	3	2

15. For the pupils, the third category of ‘**perception of gender identity**’ was also illustrated as a diagram but in this case the key codes from the spreadsheet were listed. For example, the diagram (Diagram 8.4) for individual boys (School A) is illustrated below:

Perception of gender identity

### Summary of some of the points made:

- Recognition that not all boys the same – multiple identities
- Way children are brought up makes a difference

### Perception of boys' gendered identity:

- Boys less concerned about performance
- Boys concentrating less
- Boys less interested in learning and hence revise less
- Boys more likely to misbehave – talk more; more easily distracted
- Boys more sport focused
- Boys less demonstrative when supported but appreciate help
- Peer pressure worse for boys
- Boys motivation is important

### Perception of girls' gendered identity:

- Girls study more in class and at home; girls more focused in class and on their learning
- Girls do not misbehave
- Girls are more sensible
- Girls more interested in learning
- Girls revise in a different way – ‘exhaustive’
- Girls more mature
- Perception that teachers know that girls are going to perform better than boys

## Appendix 10 (cont)

16. One spreadsheet was set up for teachers with the category of **‘perception of factors influencing boys’ learning’**. The interviews with teachers were focused on exploring their views of what supported or hindered boys’ learning, and to see if they had any views on the differences between boys and girls linked to learning. To best summarise this information the columns in the spreadsheet were: ‘Concepts’, ‘Views about boys’ learning’, ‘Views about girls’ learning’ and ‘Neutral stance – non gender specific points’. The same process as the other interviews was followed to arrive at a conceptual map.
17. The coding, conceptualisation and recording and ordering of the concepts for the interviews with parents were carried out in the same way as teachers. Because of the content of the interviews a column of ‘perception of girls’ learning was added to the spreadsheet but not one relating to a neutral stance as for the teachers because the conversation was about their sons and this was the focus, not from a standpoint of exploring any perceived differences between boys and girls.
18. The final part of the process was to develop a theory grounded in all of the data. There was a continuously iterative and comparative process, of reading and scrutinising the qualitative data: concepts and provisional categories, ongoing throughout the schedule of interviews. At the end of the schedule of interviews, the data was examined and re-examined to consider the meaning of the points and views expressed. This process of induction and abduction led to a tentative theory emerging following the boys’ interviews in School A. The process of deduction was used when considering how this theory fitted with the data gathered in the other two schools.

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