The lived experience of high achieving Year 13 boys using silent in-school individual study time during timetabled study periods

A thesis presented in partial fulfilment
of the requirements for the degree of
Doctor of Education

University of Otago,
Dunedin,
New Zealand

John Barry Gibbs
2017
Abstract

This human science research investigates the phenomenon of silent study in a high performing, highly regarded school was in a high decile socio-economic area New Zealand. It constructs a phenomenological description of the meaning of the lived experience of compulsory in-school, supervised, non-guided, silent study periods for Year 13 boys in a large single-sex school. The study’s thirty-five participants were selected from a population of 303 Year 13 CIE students who were preparing for Cambridge International A-Level Examinations and not for the National Certificate of Educational Achievement. Transcripts of interviews during 2014, from three groups and twelve individuals provided comprehensive descriptions of participants’ direct experiences of silent study. Van Manen’s (1997b) framework informed the research design and Gadamer’s (1960/2012, 2006) philosophical hermeneutics formed the basis for reflective interpretation from the interview transcripts. Significant phrases or sentences were identified and extracted. A hermeneutic process of analysis was then used to identify their meanings. The meanings were clustered, and three themes isolated for structuring the writing of the phenomenological description. The themes dealt with the effectiveness of silence for study, how silent study can stimulate wise and appropriate choice of learning activities, and the complexity of student/student and student/supervisor relationships. To construct the phenomenological description each theme was examined through the lens of each of Van Manen’s (1997b, 2014) five existentials - corporeality (lived body); temporality (lived time); spatiality (lived space); sociality (lived relationships); and materiality (lived things and technology). The essential meanings of silent study for all participants are presented. Participants found that silent study was a new experience, but they adapted quickly and found it quiet, peaceful, and beneficial. They liked the silence, the consistency of the routines, the physical comforts, having the same desk every day, and the freedom of choice of activities. They felt isolated from others, but that minimised distraction, because they did not like interruption.
Acknowledgements

It is true to say that this work has been a labour of love, thanks to the wonderful young men of the Study Centre who expressed great interest in what was emerging throughout the years of gathering and analysing data. Those who participated in the interviews were willing and direct in their responses. The staff of Auckland Grammar School and particularly the Headmaster, Tim O’Connor, were generous in their support and interest in the project.

The project could never have come to fruition without the dedicated support, advice, and guidance from three wonderful supervisors who developed my very raw knowledge of qualitative research to an acceptable standard, so necessary, as my background was in quantitative scientific study. Dr Gregory Burnett, Dr Ruth Gasson, and Professor David Bell did not let me get away with anything that was not up to their standards, but all of them did so in a patient, gentle, but unfailingly firm, manner. Nothing was ever too much trouble for them and as well as their expert tuition, they were just as supportive in ensuring I was coping in the times when the going got tough, as it inevitably did, at times.

My EdD colleagues in the 2012 Cohort have remained in touch as we journeyed in our doctoral studies together, and we provided support to each other. Thank you, particularly, to Alison Fields and Alex Kirk. Finally, thanks to my ever-patient wife, Eleanore, who has supported me at every stage of this project.
TABLE OF CONTENTS

ABSTRACT ......................................................................................................................... III

ACKNOWLEDGEMENTS ...................................................................................................... V

TABLE OF CONTENTS ....................................................................................................... VII

LIST OF TABLES AND FIGURES .................................................................................... XIV

PREFACE - THE LIVED EXPERIENCE OF HIGH ACHIEVING YEAR 13 BOYS ............................ XV

CHAPTER 1 – INTRODUCTION ....................................................................................... 1

Background ............................................................................................................................. 1

Context ................................................................................................................................. 3

The school ............................................................................................................................. 5

Cambridge International Examinations ............................................................................. 7

Table 1 UCAS Tariff Points ............................................................................................... 9

Students and silent study .................................................................................................... 11

My background .................................................................................................................. 12

My role as the researcher ................................................................................................. 13

Research purpose ............................................................................................................. 13

Significance, scope, and definitions ................................................................................ 15

Significance ....................................................................................................................... 15

Scope ................................................................................................................................. 15

Thesis outline ...................................................................................................................... 16
CHAPTER 2 – LITERATURE REVIEW

Defining and explaining silent study in the research school ........................................ 19
Silence for in-school study ............................................................................................. 20
In-school study ............................................................................................................. 22
In-school supervised study compared with unsupervised study .................................. 23
Boys’ learning and achievement .................................................................................. 25
Single sex or co-educational schools ........................................................................... 26
Table 2 Students gaining university entrance in 2014 by decile .................................... 27
School climate, ethos and culture and academic success .............................................. 28
Class and socio-economic factors .............................................................................. 30
Learning Styles ........................................................................................................... 31
Motivation, engagement, and academic achievement ................................................. 32
Self-directed / self-regulated learning ......................................................................... 33
Sustained silent reading .............................................................................................. 35
Computers for study .................................................................................................... 36
Time spent on homework .............................................................................................. 37
Silent study versus collaborative group work ............................................................. 39
Teacher/student relationships ..................................................................................... 44
Parents and autonomous learning .............................................................................. 45
Distractions in home study ......................................................................................... 47
Facebook and media multitasking .............................................................................. 48
Summary, implications, and conclusion ....................................................................... 51

CHAPTER 3 THEORETICAL PERSPECTIVE

Human science enquiry .................................................................................................. 53
Researching lived experience ....................................................................................... 55
Philosophical developments underpinning hermeneutic phenomenological research ...... 57
Hermeneutics ................................................................................................................ 57
Schleiermacher and Dilthey ........................................................................................ 58
Heidegger ........................................................................................................................................59
Gadamer .......................................................................................................................................60
Effect of history or tradition ..........................................................................................................63
Horizon .........................................................................................................................................63
Gadamer’s hermeneutic circle ..........................................................................................................64
Phenomenological meaning ...........................................................................................................66
Emphasis of the research ................................................................................................................68

Summary .......................................................................................................................................68

CHAPTER 4 – RESEARCH DESIGN, METHODOLOGY, AND METHOD .... 69

Research design ................................................................................................................................69

Methodology ...................................................................................................................................70

Turning to a phenomenon which commits us ..................................................................................70

Investigating experience as it is lived ...............................................................................................70
  Reflecting on the textual data to extract meanings .........................................................................72

Reflection on essential themes .........................................................................................................72

Descriptions of the phenomenon .....................................................................................................73

Pedagogical relation to silent study ..................................................................................................77

Balancing the research context .........................................................................................................77

Method ............................................................................................................................................78
  The sample ....................................................................................................................................78
  Ethical safeguards ..........................................................................................................................80
  Gathering data ...............................................................................................................................80
  Table 3 Interview questions ...........................................................................................................82
  Significant statements .....................................................................................................................83
CHAPTER 5 – THEME 1 – SILENCE, DISTRACTION, AND FOCUS ........93

Lived body .................................................................................................................. 93
Adaptation to silent study was required, as it was a new and different experience .......... 93
Silence can promote undistracted study with positive learning outcomes .................... 96
Change in the level of noise was disturbing .................................................................. 97
Silence although limiting was generally preferred for practical reasons ....................... 98
Home study was not usually silent, but some participants found a way to deal with this ... 100
Silent study can reinforce understanding, but cannot provide help ............................... 101

Lived space .................................................................................................................. 105
Large size of the room produced some negative and some positive perceptions .......... 105
Silent study encourages thinking and reflection .......................................................... 106
Silent study is like study in the silent study space of a library .................................... 107

Lived time .................................................................................................................... 108
Participants viewed work output as a measure of lived time ........................................ 108
Silent study gives students more free time .................................................................. 109

Lived human relationships .......................................................................................... 109
Distraction from other people is minimal in silent study ................................................................. 109

**Materiality (lived things and technology)** ...................................................................................... 111

Social media notifications can distract homework ............................................................................. 111
Music playing while studying may affect learning .............................................................................. 114

**Summary** ........................................................................................................................................ 117

**CHAPTER 6 – THEME 2 – PLANNING AND LEARNING ACTIVITIES ...... 119**

**Lived time** ...................................................................................................................................... 119
Silent study gave students more time for other things ......................................................................... 119
Freedom of choice was liked ................................................................................................................ 120
Planning for silent study was generally ad hoc .................................................................................... 121
Several factors affected choice of what to do in silent study ................................................................ 122
Homework was a priority in silent study ............................................................................................. 123

**Lived body** ..................................................................................................................................... 125
Effect of school culture ......................................................................................................................... 125
Silent study was valuable for learning or memorising ......................................................................... 125
Transition to higher education ............................................................................................................ 128

**Lived space** .................................................................................................................................... 128
Seating arrangements assisted engagement ......................................................................................... 128
Home or school was seen as better for certain tasks .......................................................................... 130
Study periods could benefit from some flexibility .............................................................................. 132

**Lived human relationships** ........................................................................................................... 133
A competitive environment affected students’ work output ............................................................... 133
Perhaps study periods could be optional ............................................................................................ 134

**Materiality (lived things and technology)** ...................................................................................... 135
Lived things and technology are valued ............................................................................................. 135
Computers were found useful .............................................................................................................. 136
CHAPTER 7 – THEME 3 – STUDENT/STUDENT AND
STUDENT/SUPERVISOR RELATIONSHIPS ......................... 139

Lived human relationships .......................................................... 139
Silent study management was different from classroom management ........................................ 139
Supervisor/student relationships were different from teacher/student relationships in some ways ... 140
Changing the supervisor produced small changes ........................................................................ 143

Lived body ......................................................................................... 145
Effect of others working was motivational ................................................................................. 145
The ‘Grammar Way’ affected silent study positively .................................................................. 147
School culture and socio-economic background affected self-regulated learning ...................... 149
Study periods were not designed for collaborative learning ......................................................... 150
Some saw tutorials as a possible alternative ............................................................................... 151

Lived space ......................................................................................... 152
Another room for some study periods could allow collaborative learning ................................. 152

Lived time ......................................................................................... 154
Distractions from other people were limited ............................................................................... 154
Distractions were from other ‘things’, not fellow students .......................................................... 155
Silent study gave time for other activities helping others ............................................................. 155

Materiality (lived things and technology) .................................................................................. 156
On-line student/teacher collaboration was possible and useful .................................................... 156
Student/student collaboration through computers was limited at school compared with home .... 157

Summary ............................................................................................ 158

CHAPTER 8 – CONCLUSION ............................................................... 161
Key research findings ................................................................................... 161
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vignette of a typical (composite) student</td>
<td>166</td>
</tr>
<tr>
<td>Essential meanings</td>
<td>167</td>
</tr>
<tr>
<td>Essential meanings of silent study</td>
<td>169</td>
</tr>
<tr>
<td>Outcomes</td>
<td>169</td>
</tr>
<tr>
<td>Limitations</td>
<td>171</td>
</tr>
<tr>
<td>Implications</td>
<td>172</td>
</tr>
<tr>
<td>Recommendations</td>
<td>175</td>
</tr>
<tr>
<td>Conclusions</td>
<td>176</td>
</tr>
<tr>
<td><strong>EPILOGUE</strong></td>
<td>179</td>
</tr>
<tr>
<td>The lived experience of silent study for five prefects</td>
<td>179</td>
</tr>
<tr>
<td><strong>APPENDICES</strong></td>
<td>181</td>
</tr>
<tr>
<td>Appendix 1 Board of Trustees approval</td>
<td>181</td>
</tr>
<tr>
<td>Appendix 2 Method of Recruitment</td>
<td>182</td>
</tr>
<tr>
<td>Appendix 3 Ethics approval</td>
<td>183</td>
</tr>
<tr>
<td>Appendix 4 Information form for participants, parents, and caregivers</td>
<td>185</td>
</tr>
<tr>
<td>Appendix 5 Consent form for participants</td>
<td>189</td>
</tr>
<tr>
<td><strong>REFERENCES</strong></td>
<td>191</td>
</tr>
</tbody>
</table>
List of tables and figures

Table 1 UCAS Tariff Points........................................................................................................... 9
Table 2 Students gaining university entrance in 2014 by decile ..................................................... 27
Table 3 Interview questions ........................................................................................................... 82
Table 4 Selected examples of significant statements from silent study students, with my
understanding of the meaning ......................................................................................................... 84

Figure 1 Data collection and analysis framework........................................................................... 88
Preface - The lived experience of high achieving Year 13 boys

This research investigates silent study periods within the context of a model of practice in one selected school setting. This preface establishes the context of the research. Study periods are common in secondary schools, but silent study periods as they operate in one school are a phenomenon that seemed worthy of investigation, to help inform an understanding as to whether they operate in the best interests of the students. I supervise silent study periods in the school. This role assumes a management component and a pastoral component, the latter inherent in my responsibility to provide and maintain a climate that I believe is in the best interests of students. In a typical study period, 100 Year 13 boys (mostly 17 or 18 years old) walk into the large study room (Study Centre) and sit down to work in absolute silence. Most greet me warmly when they enter, particularly if I am near the door. They sit at an assigned desk, take out what they need for the work they have chosen to do that day and get started. They may ask to use a computer or a library book. Apart from that, examination-like conditions prevail until the bell goes. In fact, visitors often think there is an examination in progress. I check the roll as I move quietly around the room.

From my perspective, the silence seems to create an unusually peaceful atmosphere with no sign of tension, outwardly at least. When the bell goes, the silence is over, and some boys thank me with a smile as they leave or exchange other pleasantries. It would be useful to understand exactly what is going on here, to gain an informed understanding of how the boys experience this educational practice.

To some, the scenario described above, repeated daily until the boys are on study leave for their final examinations, may seem to indicate extreme, perhaps even unreasonable control. Yet the Study Centre operates on a stated policy of ‘no punishment’. These boys appear to be mature, sensible, intelligent, and articulate, and the working atmosphere seems to me to be invigorating and conducive to study. I do not want to disturb the boys by circulating around the room too often, as an examination invigilator might, because there appears to be no need to do so. A boy
occasionally goes to sleep. There could be a multitude of reasons for this, ranging from tensions in the family, lengthy sports practices like early morning rowing, or perhaps too many computer games the night before. Only rarely and for a good reason would I disturb them. In the year of data-gathering for this research (as in other years) there seemed to be an excellent working atmosphere in the Study Centre. The boys appeared most pleasant and co-operative. Many of them had major sporting commitments and they regularly indicated that they appreciated the fact that study periods provided them with valuable time to catch up on work. There appeared to be a good deal of work done.

Many of the participants in this research had extensive co-curricular involvement. I saw evidence of this when my day’s work was over, and I walked across playing fields at the at the back of the school to my car. I passed a line-up of rowing machines with strong, agile, perspiring boys putting everything they could into improving their performance. Then I walked past the cricket nets with an impressive display of constantly changing batting, catching, and fielding exercises. I saw so much skill and energy here, and then the same with the track and field athletes further across the field. I wondered how those multi-talented youths had enough of a reserve of energy for a friendly greeting as they passed by around the track at breakneck speed.

The phenomenon of compulsory silent study is part of the lived experience of Year 13 boys in the selected school. My observations of Year 13 boys’ acceptance of silent study, my interest in the other aspects of their life, my desire to assist them towards a bright future, and my wish to understand their fascinating interaction with others, invoked an insatiable curiosity about that part of their lived experience that is silent study. This is the reason for this research which examines the very nature of the silent study phenomenon as a lived experience. It goes further than analysing participant understandings of that phenomenon by seeking interpretations and meanings. The first chapter provides the background to the research.
Chapter 1 – Introduction

This chapter introduces this research study on the field of in-school, timetabled, supervised, non-guided, silent study periods (hereafter referred to as ‘silent study’). It provides information on silent study, the population, and the site for this research. The first three sections of this chapter outline the background and context of the research and the research purpose. The next section describes the significance and scope of the research. The last section includes an outline of the remaining chapters of the thesis.

This chapter and the Preface serve several purposes. First, they set out how I (as the researcher) describe the population in this research. Second, they explain to the reader what I believe study periods appear to be. Third, they allow me to describe and reflect on my pre-data-gathering understanding of silent study prior to participant interviews. I state prior to the research that I believe silent study is a ‘good thing’ and has substantial benefits for students, at least in this school. I do this to acknowledge my view and to later compare that stance with the findings from the research. I emphatically state that this stance represents my pre-research point of view and every effort will be made to listen to the boys, present their views and be prepared to change mine. I accept that even if students enjoy an educational strategy like silent study, enjoyment is only one measure of its educational value.

Background

Understanding a phenomenon like silent study involves interpretation. My pre-conceptions, biases, and prejudices colour my interpretation, and throughout the Preface and this chapter I declare my own personal stance on silent study. This is one way of managing researcher bias (van Manen, 1997b). I do not consider it possible to set aside pre-understandings and assumptions I make (Gadamer, 2006) about silent study. Therefore, they are part of my interpretations to be considered and reflected upon (Gadamer, 1960/2012; van Manen, 1997b). In the presentation of data, I report, organise, and summarise participant descriptions. In the subsequent chapters, I present my interpretations after much reflection on these participant descriptions.
Prior to 2006, the Year 13 boys had study periods, but they were not silent. Study periods were supervised, but the level and nature of supervision was as variable as the individual staff member involved. Students had to remain in the study room, but, within reason, they had considerable choice of how to use the study periods and did not have to be silent. As the first full-time supervisor for all study periods at the school I made the decision that they should be silent. The students did not receive this well, initially, as they saw it as a restriction on their freedom. Thus, it would be fair to say that the reasons for making study periods silent at the beginning (August 2006) were more for reasons of management and less to improve the quality of student learning. The Headmaster had asked me to take on the supervision role because he decided the study time was not being used effectively. This form of study, including the fact it is silent, offered a management advantage with one supervisor for all study classes setting consistent standards.

Silent study enabled students to work at their own pace without interruption on work they had chosen, using methods that suited them within certain parameters. It had disadvantages related to boys not being able to use the time to seek help from their peers, as they could in their homework times at home, and could have done if study periods had not been silent. As the boys’ supervisor, I needed to understand if, in addition to making it easier for managing a large class, silence served a dual purpose, that is, whether it also fostered a good learning environment. While over the years I believe there has been a change in the boys’ acceptance of silence, to such an extent that its value is now widely accepted, student descriptions may confirm, disprove, and inform my view. I argued silent study respected the rights of those who wanted to use the time to do some serious study. However, what is more important, and the reason for this research, is to determine what students thought, to see whether there was a common view, and to listen and understand those whose view differed from the majority.

For most of my teaching colleagues, silent study is regarded as a ‘good thing’ because their students tell them that they can produce a great deal of individual work in this time. Thus, their view is based on hearsay and/or on the quality or quantity of written work students say they do in silent study. However, my colleagues cannot tell me why the output is said to be so high. Seventeen-year-old
boys may not be accustomed to absolute silence, but annual evaluations in each of six years prior to beginning the research indicated not just boys’ acceptance of silent study but generally their warm approval. To better understand and interpret this phenomenon I sought detailed descriptions from a sample of Year 13 boys about the lived experience of silent study. I was aware that the boys might be reluctant to give negative feedback to me. I address that issue when I describe how my role as researcher/supervisor is considered in interpreting the boys’ descriptions, in Chapter 4.

Context

Data were gathered from the participants in this research in the 2014 school year. Participants were drawn from all Year 13 students sitting Cambridge International A-Level Examinations (CIE) in the large decile 9-10 boys’ school. In New Zealand, school decile rating is determined by household incomes, parental occupation, household crowding, educational qualifications of parents, and whether or not parents are on income support (Ministry of Education, 2014b). “Decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10% of schools with the lowest proportion of these students” (Ministry of Education, 2014a). School decile ratings are recalculated every five years from New Zealand Census data (Ministry of Education, 2014b). The school was decile 10 but became decile 9 in the year of data-gathering, following the 2013 Census, since the school catchment then contained an increase of lower socio-economic status homes, particularly apartments, in some Census areas (meshblocks).

All participants were studying for CIE. The school considers that CIE, an international standards-based examination, to have a higher status than the National Certificate of Educational Achievement (NCEA), the New Zealand achievement standards-based national qualification system which has four reporting levels (not achieved, achieved, merit or excellence). The school is streamed by attainment because the school leadership assumes competition improves motivation, and the school leadership regards examinations as the definitive measure of academic success (O'Connor, 2013, 2016). The school insists on CIE authorities providing students and the school with marks as well as grades. All Year 11 students study for CIE. Thus, entry to Year 13 CIE and into silent study is
dependent on gaining high marks in CIE external examinations in the two previous years. However, students are permitted to opt for an NCEA pathway rather than CIE in Year 12 or Year 13, regardless of their academic attainment in Year 11. In the year of data gathering, only two students from those eligible for CIE opted for NCEA. CIE students constituted approximately 70 per cent of Year 13 students at the school. Students studying for NCEA did not have study periods. Each year, silent study occupied 20 per cent of Year 13 CIE students’ time at school. They had seven timetabled 40-minute periods of silent study per week in the Study Centre. The Study Centre is a 24 metre by 12 metre room with 120 well-spaced desks and chairs. Computers and a library are available. In the year of data gathering there were 29 to 104 boys, in each of the five study classes, in study periods, at any one time. I was the sole supervisor for all five classes. Students were asked to observe and maintain total silence when they came into the room, and each individual student decided each day how and what he studied for CIE, within a broad framework set by the school.

From my observations, the work that most boys usually chose to do was like ‘homework’ (set by subject teachers) but done at school. For this research ‘homework’ is defined as teacher-set tasks carried out during non-instructional time (Bembenutty, 2011b; Cooper, 2007; Trautwein & Köller, 2003). Work that was done in silent study also included tasks like assignments, making notes, reading set texts, memorising, and obtaining subject-related resources. Students could get up to peruse the library, borrow texts, or use a school computer. School computers had a wide range of software. Some students used their own laptops from the year of data gathering and both school and individual computers had ultra-fast Internet access. Certain sites like Facebook were restricted when using the school Internet. I had software that enabled me to monitor what all boys were doing on the school computers. Apart from ‘homework’, a common activity was studying readily available past examination papers along with the examiners’ specimen answers and marking schedules. Doing homework in silent study meant the students might do less work at home, or they might do some additional enrichment work.
The school

The school where this research was conducted, hereafter called ‘the research school’, was the largest boys’ school in New Zealand (Ministry of Education, 2014c). It was also the top performing school for New Zealand in the Cambridge International Examinations in the year of data gathering (O’Connor, 2015). For these reasons, along with its sporting and other success, it was very highly regarded in the community, nationally and internationally. The school believes strongly in competition and all students are encouraged to strive for excellence. Daily full school assemblies are held and ‘crossing stage’ for significant achievement in any sphere of endeavour appears to be regarded by students as a great honour. There is rigid streaming by attainment at all levels. Promotions and demotions between different levels in streamed classes at each form level follow examinations each school term. High expectations for examination, sporting and other success promote a competitive climate and Year 13 CIE students are generally motivated and ambitious (Education Review Office, 2011, 2016a).

The following webpage extract sets out the school’s expectations:

> Often referred to as ‘The Grammar Way’, [the school] sets its standards very high, demanding excellence across all aspects of daily life. While providing young men with a rigorous academic education, each young man in turn is expected to pursue excellence in acquiring knowledge and skills while embracing the School’s values. These values are core to upholding the School’s position of pre-eminence in boys’ secondary education. They are integrity, excellence, respect, courage, pride, commitment, and humility. Through teaching and practicing these values, we hope to develop in our students valuable personal qualities such as self-discipline, resourcefulness, adaptability, creativity, honesty, courtesy, self-reliance, healthy self-esteem, pride in personal appearance and public spirit, with the aim of using these virtues for the good of the School and the community. (O’Connor, 2016)

The Education Review Office (2011) in their review of the school commented favourably that most students entering the CIE examinations obtain a qualification and that the proportion of all Year 13
boys leaving school with University Entrance “significantly exceeds averages for decile 10 schools” (p. 1). They also commented on the very high number of CIE students gaining New Zealand scholarship awards. This is even though examinations for New Zealand Scholarship awards cover different subject material from CIE. Some students will sit a scholarship examination in a subject they have not studied at school. In the year of data gathering (2014), 157 New Zealand subject scholarships were awarded to Year 13 students at the school, including one Premier Award (awarded to the top ten students in the country), and 16 Outstanding Performance awards. The school’s highest performing Year 13 CIE students achieved an average mark of 90 per cent or more in CIE. In the CIE A-Level examinations, 41 per cent of grades gained by Year 13 students were A* or A (O’Connor, 2015). The CIE grading system is discussed in the next section.

The school is situated in a high socio-economic area. Houses in the school zone are among the most expensive in the country and there are few, if any, out-of-zone places available. In the year of data gathering, in the January to June period, compared with the same period the following year, the median house price in the suburb containing the school increased by 42.9 per cent (Nichols, 2015). By February, 2017, the median price for a three-bedroom home in the school zone had climbed to $2.9 million (Miller, 2017). There is a close relationship between socio-economic status (and thus decile rating), and school achievement in New Zealand (Strathdee, 2012; Wylie & Berg, 2014). The school population includes around 15 different ethnicities. Chinese students dominate high attainment (O’Connor, 2015). Most of them are permanent residents. It may be relevant that traditional Chinese parental expectations venerate academic success and students are expected to work hard to uphold the family honour (Kim, Rendon, & Valadez, 1998). Traditional Chinese cultural values include some that schools (including the research school) tend to value and reward (Callahan & Hertberg-Davis, 2012). These values include, for example, perseverance, self-discipline, compliance, obedience, and respect for authority (Kim et al., 1998). These are also the values mentioned above as dimensions of ‘The Grammar Way’. Steinberg (2014) reported the result of his much earlier study of school success involving 20 000 American high school students. While family wealth and being a member of a two-parent household had been reported in other
studies as major demographic factors in school success, his work showed that “being Asian’ was more predictive of [academic] success than coming from a wealthy family. The reasons were simple” (Steinberg, 2014, p. 119). Asian [Asian-American for Steinberg] students spent double the amount of time on homework and always completed it, they paid more attention in class, they attended school more regularly, and they “were more likely to believe that sustained effort paid off” (Steinberg, 2014, p. 119).

**Cambridge International Examinations**

Study periods were introduced in 2006 after the school had trialed CIE in some subjects over six years. CIE was introduced in 2006 because of the school’s dissatisfaction with the National Certificate of Educational Achievement (NCEA), which was introduced between 2002 and 2004. In New Zealand, several schools adopted CIE or the International Baccalaureate (IB) alongside the NCEA for similar reasons, including the following. Students studying for assessment towards NCEA are assessed against standards, not against each other (New Zealand Qualifications Authority, 2010) and there are often components of internal assessment. The research school prefers assessment like CIE, where students are ranked by marks gained in externally-assessed end-of-year examinations, marked with no input from teachers. Even for NCEA classes, school examinations are reported to parents using marks and places in class. Where CIE syllabi permit either internally assessed components or externally assessed components, the school will always choose the latter, as it favours an external mark or grade. Comparison of the achievement of University Entrance via NCEA, with entrance through CIE, is not easy. NCEA assessments are regular and involve a combination of internal and external assessments. In some cases, examinees may have a chance to correct work presented in an internal assessment, having been told there is an error. A different type of second chance is provided in CIE, whereby a student may elect to sit a second different examination in subjects of their choice in the next six-monthly examination session. They do so to try to gain a higher grade in those subjects. These are colloquially called ‘resits’. Both CIE and NCEA employ reliable examinations systems (Cambridge International Examinations, 2014; New Zealand Office of the Auditor-General, 2012), they are just different. University Entrance via NCEA
is not discussed further because it is not relevant to this research. For parents, one financial
disadvantage of CIE is that students pay $472 per year (2016 total amount for four subjects), or more
if a course includes some practical subjects, but NCEA is subsidised by the New Zealand
Government and students pay $76.30 per year (2016 total amount for all subjects). High decile
schools are more likely to subscribe to CIE than low decile schools, and parents can usually afford
the higher fees.

The CIE organisation is the largest examination provider in the world. Their website states
“Cambridge International A-Levels are based on rigorous, academic syllabuses that are accessible
to students from a wide range of abilities yet have the capacity to stretch our most able” (Cambridge
International Examinations, 2014, p. 3). CIE states that their A-Levels are equivalent to those
managed by the various examining boards in the United Kingdom (Cambridge International
Examinations, 2014), but unlike those boards, compliance with the United Kingdom Government
regulations is not required. A-Level grades are reported from A* (highest) to E (lowest). In the
Cambridge International Examinations, at Advanced Subsidiary (AS) Levels, the grades run from A
to E (no A*). The A* is not equivalent to A+ but is part of a reporting system peculiar to CIE and is
awarded in each subject to candidates with marks 90 per cent or more. Several countries (including
New Zealand) use the Universities and Colleges Admissions Service (UCAS) tariff for University
Entrance and for entry to competitive courses including conjoint degrees. University Entrance
requires 120 UCAS tariff points (and meeting numeracy and literacy requirements) although, as an
example of a highly competitive course, 310 points are needed for a biomedical conjoint degree at
the University of Auckland (University of Auckland, 2014).

For the purposes of University Entrance and entrance to competitive tertiary courses, New Zealand
Universities have decided that CIE grades at A-Level should generate double the points contribution
compared with grades at Advanced Subsidiary Level (University of Auckland, 2014). This is
because study in an A-Level subject is undertaken over two years. The same applies on the UCAS
tariff. The following table (Table 1) shows the conversion from CIE grades into points on the UCAS
tariff points system:
### Table 1 UCAS Tariff Points

<table>
<thead>
<tr>
<th>CIE Grade</th>
<th>Advanced Subsidiary Level</th>
<th>A-Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>A*</td>
<td>-</td>
<td>140</td>
</tr>
<tr>
<td>A</td>
<td>60</td>
<td>120</td>
</tr>
<tr>
<td>B</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>C</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>D</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>E</td>
<td>20</td>
<td>40</td>
</tr>
</tbody>
</table>

All British and European Universities and many United States Universities recognise CIE papers which are taken by over one million students worldwide (Cambridge International Examinations, 2017). The rigorous nature of CIE has been recognised in other counties by schools seeking alternatives to their national assessment and qualifications framework, for reasons similar to those of some New Zealand schools. In the United Kingdom, in 2010, there was on-going widespread opposition to government proposals that the regional Advanced Subsidiary Examinations be scrapped (Vasagar, 2010). This was not implemented, but in 2013, the government looked at separating the Advanced Subsidiary Examination from the A-Level Examination. Advanced Subsidiary results would no longer count towards A-Level results (Quinn, 2013). These suggestions, along with scrapping of some subjects, and delays in approving and implementing new courses, were strongly criticised by British head-teachers who described them as ‘chaotic’, ‘piecemeal’ and ‘a mess’ (Weale, 2014).

Public schools in Britain are private fee-paying schools. Public schools in New Zealand are state-funded. The result of proposed changes has been that some public (private) schools have transferred to CIE (Paton, 2013, 2014). In 2013, 72 British schools had made the change (Paton, 2013). At the end of 2016, regional Advanced Subsidiary and A-Level Examinations in the United Kingdom became separate independent examinations, with much of the subject material new, and amid confusion and concern for teachers and students (Weale & Ratcliffe, 2016). For some schools, CIE
represented greater stability and rigour than regional examination systems. Thus, it was a more attractive option. It was also preferred because Advanced Subsidiary results still counted towards A-Level results.

Much of the school population from which the participants were drawn subsequently applied for conjoint degrees or competitive-entry courses in New Zealand tertiary institutions or to study at prestigious Universities overseas. Thus, with this intention in mind, there were continuing incentives to achieve high grades in the final year of secondary school.

Since silent study periods were introduced late in 2006, examination results have improved very significantly, but many factors (variables) have been identified as affecting examination performances or results over this period. These include the employment of experienced overseas teachers who have been teaching A-Level subjects for much longer, and who have increased familiarity with CIE requirements. Additionally, the school has provided an expanded professional development programme to give teachers more training in the knowledge and skills of their subject. Furthermore, the examination system has undergone several changes in determining and reporting grades, for example, the introduction of an A* grade at A-Level. However, students from the research school also appear to have learned to make better use of their study periods. Students may now have a more serious approach to their studies as Universities increase entry standards for selective-entry courses. As already mentioned, government reforms in the United Kingdom have influenced changes to syllabi, including what subjects are to be taught and how (Vasagar, 2010; Warmington & Murphy, 2004, 2007; Weale, 2014). Some argue it is now easier to get A-Level pass grades in all subjects, that examinations are getting easier, students are now choosing easier (new or ‘non-traditional’) subjects, and that standards are falling (Warmington & Murphy, 2004, 2007). While examination results have improved, there is insufficient evidence to substantiate any one of these factors as being more significant than others in improving examination results.

Some of the factors above, and others, are likely to have also affected student attitudes to silent study. For example, students who experience silent study have more leisure time than students in
years prior to 2006, which could make their life (including study) more balanced. Therefore, it would be difficult, if not impossible, to decide the effect of silent study on examination results because some of these other factors are difficult to identify or quantify. All students in the data cohort for this study were within the same group, so no comparative analysis could be made. After reflection, I decided it was more important to find out as much as possible about the boys’ lived experiences of silent study than to consider silent study’s effect on examination results.

**Students and silent study**

From my observations before the research began there were several pieces of evidence that indicated students were receptive to silent study. It is accepted that there could well be other reasons for these observations. The pre-research observations were:

1. Students were generally punctual for study periods and even if I arrived early, they were lined up outside the Study Centre before the bell that signalled the start of the period.

2. Each day, in each year of supervising Year 13 students, as I walked towards the entry steps, I found the students left a passage for me so that I could reach the door quickly. There had never been any instruction to do this. Any student who inadvertently blocked the passage, was gently advised by his peers to move.

3. If I left the room briefly, students continued to work in complete silence without having been told to do so.

4. Students asked that I did not read the roll from the front of the room as I did initially. They suggested instead that I moved quietly around the room with the class roll to check who was absent. They decided this was less distracting for them.

5. Many students thanked me each day as they left the room.

6. Students told me they did not like interruptions to their study time, and that they were distracted from their studies by people coming into the room, including late-comers and staff.
Students at the school are used to silence in a different setting. The school day begins with a full school assembly for the two and a half thousand students. The electric bell rings, then a hand-bell, and there is then complete silence. Students remain silent until the assembly is finished. However, at the classroom level, different teachers with different teaching approaches, together with the needs of different subjects and different class levels make for a variety of classroom management and teaching styles, and silence is not a classroom expectation.

**My background**

This section sets out pedagogical aspects of my background and experience that are relevant to this research. My training as a chemistry teacher (in a time of shortage) ensured rapid promotion to Head of Chemistry, Head of Science, Assistant Principal, and Headmaster. Perhaps unusually, I chose to have a second career (after 12 years as a Headmaster), initially as a chemistry teacher, then Head of Chemistry, and then Study Centre supervisor, all in the research school. My career path must have affected my management style, and indeed my understanding of the lived experience of silent study, prior to the research. In my positions as Assistant Principal and Headmaster I had a major student management role. On the other hand, in those two past positions, I also had a major pastoral role, and learned much about the nature of Year 13 students. The pastoral role was an expected and necessary part of my teaching career before I came to the school, and it has continued throughout my time here. In my position as Assistant Principal, there were no Counsellors, no Year Level Deans, no Teacher Aides, and no Science Technicians. As well as teaching three senior chemistry classes, together with management, administrative and leadership roles, I had total responsibility for school-wide student behaviour management. I have had extensive experience in teaching and managing Year 13 boys. As a classroom teacher, my teaching programme has involved at least one but more commonly two Year 13 chemistry classes, including teaching two such classes every year as Head of Chemistry at the research school. As Assistant Principal and as Headmaster I personally managed the prefect system which was made up exclusively of boys from Year 13. My career has given me extensive experience in interviewing boys. Therefore, I bring distinct interviewing skills to this research.
My role as the researcher

The way my role as supervisor could have influenced what the boys were prepared to say is addressed in Chapter 4. Van Manen (1997b, p. 69) maintains, “the best way to enter a person’s life-world is to participate in it”. In this research, my role as researcher was “emic, inside, and immersed” (Johnson, Dore, Trainor, & Pascal, 2011, p. 174). I was immersed as a supervisor, not as a student. However, I could do some of my own study in timetabled study, and to that extent I was also a student. The difference was that my primary role involved a duty of care. I will not elaborate further on my own lived experience of silent study as this research is about Year 13 students’ lived experience and not mine.

My role as Supervisor was to manage the Study Centre facility. I did not have any other duties like playground duty. I chose to adopt silence for study periods with the school’s support. Students were told examination conditions prevailed in silent study. Behaviour management was based on mutual respect. Students were expected to respect the rights of other students and this worked well. Boys were corrected for transgressions, but no punishment followed the correction.

I was there to see that all boys attended regularly. I attended to the usual administration tasks, and the management of the facility. The rights of each individual boy to be able to study without interruption were paramount. The school had a clearly understood policy related to cyber safety. All students were briefed each year and any student Internet use was monitored. Software was available for me to monitor students’ computer use, but, as with other aspects of silent study, Year 13 students were trusted in their use of school computers or their own device. My experience was that any irrelevant use was slight, usually to do with sporting events, and easily corrected with a gentle reminder from me, in the form of an on-screen message, if they were using a school computer.

Research purpose

The purpose of this interpretative research was to examine Year 13 boys lived experience of in-school, timetabled, supervised, non-guided, silent study periods to gain an informed understanding of how this practice was experienced. To find out more about their lived experience, an in-depth
understanding was sought from the descriptions of those experiencing it. Comprehensive descriptions that stayed close to the lived experience of silent study as it was directly experienced by the students were needed (van Manen, 1997b) to know what silent study was like for them. This research sought to uncover a range of participants’ experiences in silent study, some previously unknown. My pre-understanding of silent study as outlined in the Preface and in this chapter, was that it was a ‘good thing’ because silent study seemed to enhance students’ learning and they seemed to enjoy it. However, this research was about Year 13 boys lived experience, not mine, and the reason for outlining my pre-understanding in the Preface and here was to raise my awareness of it, and take it into account in this research, as could the reader of this report. The over-riding purpose for this research was formative; to gain an insight into and an understanding of silent study, as experienced by the Year 13 boys.

In the interpretation of student descriptions of their lived experience of silent study, an explanation for the merits or disadvantages of silence for personal study was expected to emerge. For example, the silence may be perceived to be what Lees (2012) calls ‘strong silence’ or productive silence as opposed to the ‘weak silence’ used for behaviour management, or it may not. The boys’ beliefs about the effectiveness or otherwise of silent study, and suggestions for change were expected to emerge. While the research may provide a mandate to maintain this educational strategy, on the other hand the school may utilize the research to consider changes. The purpose of silent study implied, but not stated by the school was that since students took four subjects, silent study made effective use of the remaining timetable block by giving students time to consolidate their learning. This research should show whether the Year 13 boys experienced this purpose as true. I knew very little about how my role in managing the Study Centre and my relationships with the students impacted on their lived experience, because these aspects of silent study were rarely discussed. The research provided more information on student/student and supervisor/student relationships in the context of silent study.
Significance, scope, and definitions

Significance
This research investigates the phenomenon of the lived experience of silent study and asks questions about its usefulness or otherwise. This was important for the school since Year 13 boys spent twenty per cent of their school time in silent study. Outcomes of the research should contribute to a better understanding of students’ lived experiences of silent study, including their understandings of its usefulness, at least for the research school. The information provided by the participants may assist the school to make silent study more effective. It may also suggest changes to the type of work that is set to be done at school or at home. The findings may also be useful for informing study arrangements for secondary schools in general.

The research is expected to provide useful information on students’ use of time during silent study together with specific information on their motivation, preferred study behaviours, study habits and methods. It should complement current research on the usefulness of ‘strong’ silence in schools (Lees, 2012). The research adds to research on student voice since it focuses particularly on student descriptions of their experiences. The school may be better equipped from this research to write a policy for study, something which it does not have at present.

Scope
The scope of the research was a reflective enquiry into the meaning of the lived experience of silent study by interviewing 35 Year 13 boys in one school. The participants were asked to describe their specific lived experiences of silent study so that these data might assist better understanding of this phenomenon. They were also asked how and why they experienced what they did in silent study.

The challenge was to seek a deeper and richer understanding of silent study as a lived experience, including finding the unexpected. It was of great importance in this research that issues of this nature could emerge, and that I could accept their significance to this investigation even if they challenged my personal views. I knew I must constantly be aware of my pre-understandings, prior knowledge,
expectations, and personal views throughout the research and take them into account so that I was open to what was appearing in the research.

In the Preface, I described my pre-research observations of these students. Many of these boys seemed to push their bodies to the limit both in study and in their enthusiasm for other activities. Their lives were extremely busy, and their silent study provided some time and space for them to complete their daily learning tasks. That endeavour was also affected by relationships within the Study Centre, and by material resources (Van Manen’s (2014) ‘things and technology’) that were there to assist their learning. So, there were five factors that affected their lived experience, and that needed to be explored in this research – body, time, space, relationships, and things/technology. Van Manen (2014, p. 302) calls these “universal themes of life” because they “belong to everyone’s lifeworld.

**Thesis outline**

The Preface and Chapter 1 provide the contextual background for the research, including my background and role in the research. The Introduction also provides some justification for the ‘lived experience’ research approach. These sections also acknowledge my own pre-understandings so that I remain aware of any influences that need to be considered in my interpretations.

Chapter 2 is a critical review of the relevant literature that informs this research including factors that might influence the phenomenon of in-school silent study.

Chapter 3 discusses the philosophical foundations which underpin this research, presented as an historical sequence.

Chapter 4 examines the qualitative methodology of human science enquiry and introduces the method and research design or plan of action. It emphasises the holistic nature of human science enquiry, and the sequence of events in gathering and analysing data. The method used to gather and analyse data gathered in interviews constructed around open-ended interview questions is discussed, together with ethical considerations. The research questions for the study are also presented here.
Chapters 5-7 examine each of three themes emerging from the data and discusses findings and relevance to the existing literature.

Chapter 8 presents a summary outline of the key research findings, including the essential meaning of silent study. This is followed by outcomes, including answers to the research questions, implications, recommendations arising from the research, limitations, significance, evaluation of the results of the research, and conclusions.

The Epilogue is a transcript of a conversation among five participants not previously involved in the research, provided, and included at their own suggestion.
Chapter 2 – Literature review

This chapter is a critical review of relevant literature providing background and justification for the research. It also provides a context for the decisions I make in the research. To plan for selecting appropriate literature, I relied on my experience of six full-time school years supervising silent study to first determine characteristics of that phenomenon. After reflection, these characteristics were sorted into a logical order and used to write a summary of silent study to structure and give order to this critical review. The summary follows in the next section.

Defining and explaining silent study in the research school

Silence and in-school study time are two important components of silent study. However, put together they do not constitute the phenomenon of silent study. Other components include the nature of silent study, its context, individual student characteristics, and the purpose of silent study. Silent study in the school is supervised, it is compulsory, and it is held in-school, to assist advancement of boys’ learning. In the case of this research it is carried out within the context of a boys-only school, with its unique school culture, and its purpose is to increase academic achievement. The school is in a high socio-economic area which can affect student attitudes to silent study. Depending on individuals’ preferred learning styles, and choice of how to use the time, silent study can provide opportunities for homework to be completed. Its success or otherwise is related to students’ motivation and engagement, as their study is self-regulated and self-directed. It may involve some sustained silent reading, and some computer work. Silent study does not permit collaborative learning, except on-line. The supervisor’s role, and thus supervisor/student relationships together with student/student relationships are different from those in a classroom. Involvement of parents, assistance from peers or from older siblings, music, social media, cell-phones, and Facebook exist for home study, and not for silent study, and these influences may be beneficial or otherwise, depending on the circumstances. For the purposes of this thesis, ‘benefit’ and success are related to whether academic achievement, as measured by school and external examination scores, is improved. Three aspects of silent study that need to be prominent throughout all sections of this
review are silence for study, how students may choose to utilise the time to advantage their learning with self-regulation, and the uniqueness of relationships compared with the subject classroom.

Silence for in-school study

Silence is a complicated phenomenon. Silence can be used as a behaviour management action or it may be used as a device to allow a time for reflection as an aid in the learning process (Li, 2001). Silence can be used as a positive force or power in learning (Lees, 2012) or as a coping mechanism in large classes (Bosacki, 2005) or a combination of any or all of these. Irwin (2007) researching boys in New Zealand secondary schools found a quiet classroom had a positive effect on thinking and learning, whereas Eddles-Hirsch (2009) found a silent (primary gifted students’) classroom prevented students from exchanging and co-constructing ideas. Zembylas and Michaelides (2004) suggest silence is something that has great value in learning because in the silence students must create their own meaning. They suggest a period of silence in the classroom should not be regarded as a behaviour management act, but rather as a device to provide an opportunity for reflecting and conditions for individual creativity. Alerby and Elídóttir (2003, p. 47) speculate that given the time and space for silence in the classroom “it can be possible for the silent and unexpressed dimension to emerge”. Recognising that silent reflection can stimulate creativity and create new meanings, teachers are now required to provide evidence of their own reflective practice as an important component of their professional development (Education Council, 2017b). This is to the ultimate benefit of students. Alerby and Elídóttir (2003) also argue that silence for both teaching and learning should be an essential component of pedagogic practice. They call this type of silence ‘internal silence’ as opposed to ‘oppressed silence’ where individuals are forced to be silent as a form of behaviour management or a disciplinary measure, for example. The kind of silence in silent study is what Lees (2012) calls ‘technique-less silence’ as opposed to ‘techniqued silence’ or ‘strong silence’ like meditation, mindfulness, or whole school silent reading. Techniqued silence is a type of silence which requires some kind of initial training, whereas technique-less silence does not. Examples of technique-less silence are pondering, thinking original thoughts, and entering one’s inner world, without any direction or control from an adult (Lees, 2012, 2013).
Periods of silence have been found to be useful in learning English; in reading, in-class writing, thinking, reflection; or as a pre-writing technique before brainstorming (Moffett, 1982; Suhor, 1991). Positive emotions, imagination, creativity and intellectual engagement can be cultivated in conditions of structured silence (Bosacki, 2005) to the benefit of any school subject. Jaworski and Sachdev (1998) examined the phenomenon of silence in secondary school classrooms. They reported that students said that silence in the classroom was more important for facilitating learning than as a control mechanism in situations where teachers used silence to get students’ attention or to show disapproval.

Lees (2012, p. 56) argued that strong or positive silence is that which favours production of deep, contemplative, and reflective thinking, and that strong silence within “a context of a whole school ethos” is optimal. Silence that is demanded for coercion is ‘weak silence’ (Lees, 2012, p. 59). Weak silence is detrimental to learning because it suppresses creativity, it is repressive, it avoids controversial issues, and ‘teacher talk’ dominates lessons (Lees, 2012). Lees (2012) interviewed teachers and head-teachers about silence in schools, although she did not interview children. She examined planned stillness and silence (meditation, spaces like a quiet garden or a prayer room, and regular times of silence) in schools. She concluded that the practice of silence has three positive connected benefits, or what she calls ‘powers’.

First, silent periods in a school can enable a shift towards thinking differently and encouraging creativity. Second, they can assist in bringing equality and democratic experiences in the school, with a subsequent positive individualistic choice. She argues an individual’s autonomous thinking is strengthened by silence, and new ideas may benefit a democratic school where an opportunity to share ideas is provided. Where traditionally hierarchically structured schools begin to embrace democratic practices, blunt authoritarianism gives way to a transformation which promotes interpersonal harmony. Third, planned periods of silence in schools have the power to utilise an individual’s own personal inner resources to make them become aware of their own uniqueness and independence “devoid of a means-end mentality” (Lees, 2012, p. 106). This in turn can create a confidence and a willingness to contribute to all aspects of school life. Lees (2012, p. 124) argues
that schools need these three contributing ‘powers’ of silence “to fulfil their educational and social promises to their pupils”. Silence is considered beneficial for creativity in individual learning. Since complete silence is observed in every study period, silence impacts on students’ lived experiences in the school setting for this research investigation.

**In-school study**

Many New Zealand schools have study periods at school in Year 13, and in the absence of evidence from the literature, anecdotal evidence suggests they are organised in different ways, particularly in whether they are guided or non-guided, compulsory, or otherwise, and in aspects of supervision. Lacking literature evidence, anecdotal evidence indicates a common type of in-school study is the ‘free period’ where students have some freedom to do as they wish but are required or expected to do some kind of study. Some schools may not require the students to be in a designated room or at school for these periods. Study halls for in-school study have been common in North American schools over many years, and they have waxed and waned in popularity or acceptance (Jaensch, 2016; McBurney & Hatfield, 1983). There is little data in the recent literature that evaluates their effect on academic achievement (Graham-Day, Gardner, & Hsin, 2010; Jaensch, 2016). Most have generally involved non-guided, supervised and sometimes silent study (Cooper, 1989b; B. Gill & Schlossman, 1996).

Some guided study halls cater only for students who are failing academically (Welsh, 2012). Dicken, Foreman, Jensen, and Sherwood (2008) found that a tutored study hall improved the rate of completion of homework. There is much variation in the nature and type of ‘free periods’ and study halls. Study periods in my research are different from ‘free periods’, and from some study halls, because the study periods are compulsory, supervised and silent, although they are not guided. Another form of guided in-school study is the after-school homework programme. The sparse literature on such programmes at the secondary level suggests they produce limited academic improvement, but only for those students who have full attendance (Cosden, Morrison, Albanese, & Macias, 2001). With the school’s support, I embraced silent study in the belief it could assist...
academic advancement more than other forms of in-school study. The school did not support the concept of unsupervised study periods.

**In-school supervised study compared with unsupervised study**

An issue related to this research is whether study supervised by school staff contributes more to high academic attainment than unsupervised study, a question examined by Cooper (1989a, 2007). My research concerns the *lived experience* of *supervised* silent study, but, if this contributes more to high attainment than homework, it could be reasonable to replace some homework time with supervised silent study. Homework is a form of unsupervised study, except in some boarding schools, where study can be supervised by teachers or tutors. Cooper et al. (2006) stated that there appeared to be no study comparing the effectiveness of homework with supervised study conducted since 1987. Earlier research on this comparison is not included here because of “inconsistent and incomplete data reporting” (Cooper, 1989a, p. 81).

A quantitative study not reported by Cooper of 13 546 18-year old American students by Keith, Diamond-Hallam, and Fine (2004) using data from the National Education Longitudinal Study made this comparison. Ethnic and family background, and previous achievements were considered. The authors stated emphatically that homework done at home had a moderate and statistically significant positive effect on high school achievement test scores, whereas in-school study had little or no such effect. Where in-school ‘homework’ had a very small indirect effect, the researchers suggested that was because students who did more in-school ‘homework’ also did more out-of-school homework, and that out-of-school homework resulted in higher grades because more homework in total was completed. The authors concluded that homework was better done at home. Cooper’s (1989b) literature synthesis found the effectiveness of in-school study versus homework depended on the student and the type of supervision, that is, whether the supervision was passive or active. He confirmed and developed this further in a later study (Cooper, 2007). The supervisor has a choice in silent study. He can passively monitor classes. Alternatively, the supervisor can actively move to engage students. Cooper concluded that no comparison about the effectiveness of each strategy
was possible because the active supervision could range from a ‘roving eye’ to something indistinguishable from an additional lesson.

Although the definition of in-school supervised study varied in the research studies in the literature synthesis, Cooper (2007) concluded that homework students outperformed about 53 per cent of the supervised study students. However, supervised study was not defined consistently across these different studies. Study time was created either by lengthening the school day, or by cutting subject time by varying amounts, and the authors of the studies did not indicate if the study was silent or otherwise. Cooper (2007) found homework had a more positive effect on achievement than in-school supervised study for high school students, but not for elementary school students. He suggested the latter were less able “to ignore irrelevant information or stimulation” (Cooper, 2007, p. 31) in their home environment. Fitz-Gibbon (1985) compared external examination marks in Advanced-Level Mathematics and English from one school that had supervised study periods, to those of nine schools that did not have supervised study periods. She found the marks were similar, but she did not explore this further. She did not specify the length of time spent on subject study or on study periods.

There appears to be no further study to date comparing homework with in-school supervised study (H. Cooper, personal communication, 27 October 2016). With the limited research on this topic, Cooper (2007) advised caution in drawing conclusions from this comparison. One (small) boys’ school in New Zealand reported using silent study (Baker, 2006) to promote achievement, but the study room also served as a withdrawal room for recalcitrant students. This may have caused confusion in these students’ minds. The success or otherwise of the strategy was not discussed. Silent study in the research school is supervised in the belief that students need adult supervision, based on the school’s judgement from previous experience, that inadequately supervised study did not provide suitable conditions for individual learning. The school also believes silent study is at least as effective as homework, and students often use silent study to complete work set by teachers which may alternatively be done at home. The school values and promotes academic achievement at all levels, but particularly Year 13.
Boys’ learning and achievement

Although achievement levels in ‘developed’ countries are rising, boys’ achievement nationally and internationally is lower than girls (Hymer, 2012). Boys’ aspirations and ambitions are lower than girls in the early years of high school, but accelerate faster to peak above those of girls by the end of high school according to a Canadian report (Shapka, Domene, & Keating, 2012). At the New Zealand primary school level, boys achieve at a lower level than girls in reading and enjoy reading less (J. K. Smith, Smith, Gilmore, & Jameson, 2012). Girls in the last three years of New Zealand compulsory schooling are more likely than boys to gain an NCEA or equivalent qualification, but there is no significant difference in students’ combined scores from the components of the New Zealand Scholarship examinations (Ministry of Education, 2016). Girls at all levels of secondary school perform better than boys in all forms of literacy, but there are no significant gender differences in achievement in mathematics and science (Ministry of Education, 2016).

According to the New Zealand Education Review Office (ERO) (2008) it is a particular group of boys (economically disadvantaged, Māori, and Pasifika) that is underachieving relative to their peers, and the reasons are complex. This was confirmed for Māori, and Pasifika in later studies by Walkey, McClure, Meyer, and Weir (2013) and research comparing indigenous and non-indigenous New Zealand and Australian students (Song, Perry, & McConney, 2014). Of school leavers, 12 per cent of non-Māori left school with no qualifications in 2011, compared with over 31 per cent of Māori (Walkey et al., 2013). For high achievers, such as the students in this research, gender differences in achievement are smaller (Hymer, 2012; Ministry of Education, 2016). The factors influencing academic achievement are complex and numerous. Hattie’s (2012) meta-analysis of over 900 research papers identified 150 such factors and some of the relevant ones are discussed in the next sections. The research school has a special character as a high decile boys-only school and believes this positively affects academic success and the popularity of the school.
**Single sex or co-educational schools**

Research published in New Zealand since 1999 indicates that boys in single-sex schools tend to do better in external examinations than boys in other schools (Education Review Office, 1999; Wylie & Berg, 2014). For school leavers in boys’ schools, 42 per cent achieved university entrance in 2012, compared with 23 per cent of boys in coeducational schools. This is partly due to the fact that 32 per cent of boys’ schools are decile 9 or 10 compared with 9 per cent of coeducational schools (Wylie & Berg, 2014). However, from 2010-2012, boys in decile 9 or 10 boys’ schools, had a 30 per cent greater proportion of leavers with university entrance than from decile 9 or 10 coeducational schools (Wylie & Berg, 2014). According to the Education Review Office (1999, 2008), boys’ schools tend to be traditional, emphasising examination results and sporting success, and this leads to academic success for some boys, but this approach does not suit all boys.

Students from high socio-economic homes generally achieve greater examination success (Allatt, 1994; J. Gill, 2004; Irwin, 2007; Martin, 2002; Ministry of Education, 2016; Teese, 2006). Therefore, the comparatively high achievement of Year 13 students at the school is not unexpected. Wylie and Berg (2014) found considerable variation in academic achievement in schools in the same decile ranking, and argued that decile ranking does not necessarily predict achievement, except in decile 9-10 schools. Their research identified some overlap in academic achievement between the different deciles, but among the decile 9-10 schools, there was only one outlier with a low proportion of leavers with university entrance. In the year of data gathering (2014), the New Zealand Qualifications Authority (2015) presented the following results by school decile (Table 2). The figures include those for all 2014 school leavers.
Table 2 Students gaining university entrance in 2014 by decile

<table>
<thead>
<tr>
<th>Decile</th>
<th>Students who entered for University entrance</th>
<th>All school leavers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>37.9%</td>
<td>25.2%</td>
</tr>
<tr>
<td>4-7</td>
<td>56.6%</td>
<td>41.1%</td>
</tr>
<tr>
<td>8-10</td>
<td>73.9%</td>
<td>60.5%</td>
</tr>
<tr>
<td>All</td>
<td>61.8%</td>
<td>45.5%</td>
</tr>
</tbody>
</table>

No breakdown by gender and school decile was available for 2014, but of those who entered 55.5 per cent of males achieved university entrance, compared with 67.1 per cent of females (New Zealand Qualifications Authority, 2015).

Overseas evidence indicates that boys in boys-only schools arguably perform better than those in co-educational schools. In New York in the United States Tyre (2008) summarised the case for and against single sex education for boys and concluded that any effective advantage of single-sex schools was slight, particularly for students from affluent homes. A longitudinal study (Sullivan, Joshi, & Leonard, 2010) carried out in Great Britain arrived at similar conclusions, except that boys in boys’ schools were more likely to gain A-Levels in English and Modern Languages which are not “male-dominated disciplines” (Sullivan et al., 2010, p. 26). The researchers suggested gender stereotypes about subject choice were less likely in boys’ schools, and the effect of male role modelling was positive. There was a better chance that those subjects would be taught by a male teacher in a boys’ school. They stated that there was some evidence from other research, that disadvantaged boys or boys from ethnic minority groups, might do better in a boys-only school, but their own research did not support this view. Students in my research have an advantage in that they attend a large high decile boys’ school with additional funds from private sources. The research school provides a wide range of school subjects and extra-curricular activities, together with extra human and physical resources to promote learning. Participation in extra-curricular activities is
actively encouraged. Additionally, the school culture as defined in the next section is an important contributing factor to the research school’s success, particularly in academic achievement.

**School climate, ethos and culture and academic success**

Several terms are used to describe the beliefs, values, expectations, assumptions, and behaviour that have a major effect on the perceived success of a school, including, but not confined to academic success. Common terms are ‘climate’, ‘ethos’ and ‘culture’, and there are also others like ‘environment’ and ‘atmosphere’. Glover and Coleman (2005) reviewed the international literature to find common usage for the three most common terms. They found ‘ethos’ refers to subjective values and principles; ‘climate’ the measurable inputs which affect measurable outcomes for students; and ‘culture’ was regarded as an integration of the two. This research uses the term ‘culture’ because it is argued later that the reality of a lived experience is not objective or subjective but may be described as ‘intersubjective’ (Frieson, 2012).

The New Zealand Education Review Office (2016b, p. 1) described what they consider constitutes an effective school culture and its impact:

An effective school culture is one in which practice nurtures potential and fosters success for all. Boundaries are understood and agreed on by everyone. A supportive and safe school culture is important, so students and their families feel accepted and have a sense of belonging. It also builds respectful relationships that foster self-esteem and contribute to student engagement and achievement…An effective school culture is one that is safe and well-organised with expectations for behaviour that allow teachers to focus on their teaching and students on their learning. It promotes student well-being, encourages participation, and enables resilience to develop.

Factors affecting school culture that have been found to improve educational outcomes for all school students include a school-wide commitment to academic learning, a public celebration of individual achievements and high expectations for students to be responsible for their own actions (Martin, 2002; Office for Standards in Education, 2003; Wylie & Berg, 2014). These factors are among those
identified in the highest performing school in the in the recent survey of achievement in New Zealand boys’ schools (Wylie & Berg, 2014). The principal has a crucial role in forming a healthy school culture which in turn has a positive effect on the efficacy of the school (Gulsen & Gulenay, 2014).

These factors are consistent with those identified by Cohen, McCabe, Michelli, and Pickeral (2009) in their extensive review of scholarly and practitioner research in this field. They described four major elements that contribute to a positive school culture. These were safety, teaching and learning, relationships, and environmental-structural factors. Safety included clear rules which are communicated and believed in, a consistent response to any rule-violation, and respect for individual differences. Teaching and learning included high achievement expectations, recognition of success, quality teaching, recognition of different abilities, systematic assessment, using data to make decisions, visionary leadership, honouring school leaders and accessibility of staff. Positive relationships between and among students and teachers included a respect for diversity, school-community involvement and collaboration, good morale, and enthusiastic teachers. Environmental-structural elements which assisted a positive culture were cleanliness; adequate, inviting, aesthetic teaching spaces; adequate class materials; and the availability of a good variety of curricular and extra-curricular options. Walkey, McClure, Meyer, and Weir (2013) argued that where schools communicated high expectations self-reported aspirations and motivation were greater. Many studies report that a positive school culture has a major impact on academic performance (Gruenert, 2005; Macneil, Prater, & Busch, 2009; Marcoulides, Heck, & Papanastasiou, 2005; Yahaya, Yahaya, Ramli, Hashim, & Zakariya, 2010).

The school in this study has a culture, promoted as “The Grammar Way”, which it constantly seeks to improve. It demonstrates the positive components of school culture noted in this section and not only seeks to measure what is successful, but also is prepared to change when evidence indicates it should. Consistently good examination and sporting results demonstrate it has a marked effect. The research school is advantaged as discussed earlier by its situation in a high socio-economic area.
Class and socio-economic factors

Bempechat and Shernoff (2012) found that higher socio-economic status was a positive predictor of academic engagement. Students from a high socio-cultural background often attend schools that provide the advantages of a positive school culture including high expectations for academic success. Added to that, parents, and competitive peers further influence school expectations. Steinberg (2014) argues that adolescents from middle-class families are more likely than those from other families to have participated in structured after-school activities like sports, drama, and music for several reasons. For example, many have come from highly regarded primary or intermediate schools (both private and state) that provided, promoted, and encouraged participation in these activities. Also, their parents may have the means to pay for extra things like after-school lessons, and clubs which are often novel and stimulating. Steinberg (2014) believes all these extra-curricular activities assist the development of self-regulation skills (discussed later in this chapter), and give children of middle-class parents an advantage at secondary school, because they have developed stronger self-regulation skills earlier. By encouraging the activities, parents help to foster these skills (Steinberg, 2014). Self-regulation skills can be taught, and some schools also incorporate ‘social and emotional learning’ (SEL) strategies into their programmes because these have also been found to improve self-regulation (Steinberg, 2014). These strategies include learning how to regulate emotions, manage stress and consider the feelings of others before taking any action (Steinberg, 2014).

There are other likely advantages of higher socio-economic background, including access to well-funded and resourced schools, good health and nourishment, adequate housing, and the provision of the necessities of life (Carpenter & Osborne, 2014). These advantages can lead to higher academic achievement with subsequent benefits. Allatt (1994) argues that these advantages or the influences of a privileged background can be transmitted by purposeful parental activity across generations and affect the choice of school to assist in reproducing their social advantage in their children. In the research school (which is often regarded as the type of independent school in Allatt’s research), the influence varies according to the ethnic background. For example, economic capital in recent immigrants may determine advantage more than networking.
derived from the social capital of longer-term residents. Snook and O’Neill (2014, p. 39) argue that “home background is the main determinant of educational achievement”. Most students in the research school have the advantage of a higher socio-economic background, and with it higher parental and school expectations, particularly the desire to strive for success and compete to reach a high standard of academic success. Academic success is also affected by the way individuals learn, and silent study may be a factor in the research school.

**Learning Styles**

Silence may affect learners in different ways. A ‘learning style’ “can be seen as the characteristics of a learner that influence the way in which that person learns” (Rolfe & Cheek, 2012, p. 176). A wide range of different learning styles is a feature of any classroom (Pritchard, 2014) and thus individuals differ in what is the most effective mode of study for them (Pashler, McDaniel, Rohrer, & Bjork, 2008). There have been several attempts to classify learning styles, but questions have been raised about the validity and reliability of classification (Sharp, Bowker, & Byrne, 2008). Sharp et al. (2008, p. 311) decided “learning styles is [sic] an educational minefield”. They (2008, p. 311) described a popular classification known as VAK (visual, auditory, kinaesthetic) as “seriously flawed”. After reviewing the extensive literature on over seventy different learning styles, Pashler et al. (2008, p. 117) concluded that, “If classification of students’ learning styles has practical utility, it remains to be demonstrated”. A recent analysis of the research literature (Newton, 2015, p. 1) drew the same conclusion and stated that the use of such classification “in all forms of education has been thoroughly and repeatedly discredited in the research literature. This undermines education as a research field and likely has a negative impact on students”. Trying to cater for different learning styles could have negative consequences (Newton, 2015). The school sees silent study as the most appropriate learning environment for individual study for the cohort of Year 13 CIE students, and does not accommodate any such differences. However, silent study is most successful when students are motivated and engaged in the learning tasks in their study time.
Motivation, engagement, and academic achievement

Students who are motivated and engaged are more likely to be academically successful. Martin (2013, p. 10) defines academic motivation as “students’ energy, drive and inclination to learn and achieve”. Martin’s (2013) research indicated that those who demonstrate positive motivation are good at planning, at task management, and are persistent; they are confident in their belief that they can understand and do well in their learning; they are focused on their learning, in solving problems and making an effort to develop skills; and they value school, believing “what they learn at school is useful, important, and relevant” (Martin, 2013, p. 10). Meaningful or productive study is dependent not only on the amount of time spent, but also on learned study habits that are used effectively to ensure study time is not wasted, and this requires motivation (Brown, 2014). Schools which promote high expectations and achievement can improve motivation and thus productive study (Sharan & Tan, 2008). Engagement is being actively involved in gaining understanding of new information (Pritchard, 2014). Christenson, Reschly, and Wylie (2012a, p. 184) observed that for many scholars, academic engagement is “multidimensional, comprised of observable behaviour, internal cognition, and emotion”. Christenson, Reschly, and Wylie (2012b, p. v) argued that academic engagement:

is not conceptualized as an attribute of the student but rather as an alterable state of being that is highly influenced by the capacity of school, family, and peers to provide consistent expectations and supports for learning…Engaged students…put forth effort, persist, self-regulate their behaviour toward goals, challenge themselves to exceed, and enjoy challenges and learning.

Motivation and engagement in any student cohort are variable and affect academic achievement. In Australia the difference in academic achievement between non-indigenous and Indigenous children is very high (Arens, Bodkin-Andrews, Craven, & Yeung, 2014; De Bortoli & Thomson, 2010; Mooney, Seaton, Kaur, Marsh, & Yeung, 2016; Tarbetsky, Collie, & Martin, 2016). These authors consistently argued that the reason was that Indigenous students tended to have developed a negative
self-concept that assumed it was not possible to alter the ability and intelligence of an individual and thus achieve greater academic success. A recent study from New Jersey in the United States (White et al., 2016, p. 17) argued that socio-economic factors, socio-cultural factors, and race are the primary and “immutable” (meaning they were unable to be changed) influences on test-based academic performance. The research school is not following a similar trend, based on limited evidence. It provided two confidential reports pertaining to a well-researched mixed-methods study of the InZone Project (Centre for Social Impact, 2015a, 2015b). The InZone Project is the school’s residential facility for disadvantaged Māori and Pasifika boys, with a similar facility established more recently for girls attending a girls-only school. The reports found test-based academic performance was improved by attending the research school, but this involved a small group of thirty-one boys, the facility had only been operating for four years, and more research is needed after the facility has been in operation for a longer time. It was assumed from limited evidence that the improved academic performance resulted from the expectations of an effective school culture, the extra facilities of a well-resourced school, and a supportive, stable living environment. Interventions at both school and at a social level were made. Changing the living and schooling environment together with improving self-concept appeared to improve academic performance. In a sense, the research school information supports the research by Whyte et al. by positing that providing a supportive, stable living environment together with school-based strategies which addressed some of the social factors identified by Whyte et al. changed the situation for some disadvantaged students. For silent study students who are motivated and engaged in silent study, study periods can be self-directed and self-regulated.

**Self-directed / self-regulated learning**

Self-directed learning is an approach where learners take responsibility for making decisions about, and being critically aware of information they seek to experience (Graves, 2013; Gureckis & Markant, 2012). Graves (2013) observes that students involved in effective self-directed learning tend to have certain characteristics. They are highly motivated, they have a firm commitment to study, and they appreciate the benefits of such an approach to learning. They feel they are in control,
they are confident, and they want to succeed. They use self-directed learning to fill the gaps in their knowledge, and thus improve their achievement (Wilder, 2014).

Self-regulated learning is the motivational activation and sustaining of processes to achieve learning goals (Zimmerman, 2008). Garrison (1997) views self-directed learning as an integration of “contextual, cognitive, and motivational dimensions” (p. 29). A widely used term in the psychological literature associated with self-regulated learning is ‘executive function’ defined as “the co-ordination, regulation and optimisation of the cognitive processes necessary for formulating goals, planning how to achieve them and carrying out those plans effectively” (Effeney, Carroll, & Bahr, 2013, p. 774). Effeney et al. (2013) found a strong correlation in 254 school-age male adolescents between self-regulated learning and executive function, and also that behavioural regulation of both increased with age. Making decisions for self-regulation and self-control are both aspects of the executive function (Vohs et al., 2014). Vohs et al. (2014) found that having to make many choices depleted self-regulation and subsequent self-control (less stamina and persistence, more procrastination, poorer mathematical performance) because making many choices consumes the same limited self-resource as that required for self-regulation and self-control. If this is so, silent study should advantage self-control since it is compulsory and controlled (less choice for students).

Year 13 students are expected to effectively regulate their own learning assisted by the controlled conditions existing in silent study. A planned process that helps to support learning is known as scaffolding (Pritchard, 2014). Given the culture of the school and the socio-economic composition of the student population, silent study could help scaffold self-regulation. This may be an advantage for students in Year 13, but not for the next year at University. While secondary school provides scaffolding to learning this disappears when students go on to University (A. Bell, Black, & Munro, 2014). Managing workloads with the freedoms of University life can be particularly difficult for those who were heavily engaged in extra-curricular and leadership activities at school because much decision-making affecting their lives was made by teachers and coaches at school but not generally at University (A. Bell et al., 2014). Independent learners and those in University halls of residence
are less affected because life there is similar to the ordered life of school, including tutors and co-curricular programmes, which ease the transition from the routine of school to independent living at University. Nearly all Year 13 students at the research school live at home or in a University hall of residence in their first year.

Bembenutty (2011c) argues that enhanced self-regulation skills can augment successful engagements with homework. This may facilitate and improve academic achievement. These outcomes may not be assured for “less skilled learners” (Bembenutty, 2011c, p. 450) because they may be less conscientious, disorganised and prone to distraction. They also may not seek help when they do not understand. Bembenutty (2011c) further argues that a successful relation between self-regulation and homework is conditional on other factors, for example, the clear purpose and meaningfulness of the homework. The skills that are employed by learners for homework are enhanced the more they are practiced (Bembenutty, 2011c). Some students do ‘homework’ at school in silent study time. Those learners who practice and enhance their self-regulation skills further in silent study may also improve their academic achievement. “Effective learners are self-regulated learners” (Bembenutty, 2011c, p. 451). Steinberg (2014, p. 206) believes the affluent middle class (which describes most boys in the population for this research) are “more likely to have the neurobiological, psychological, familial, and institutional resources necessary for successful self-regulation”. Effective learning in silent study as with any individual study requires positive self-regulation strategies, but also motivation, positive engagement, confidence in one’s ability, good study habits, and a passion for academic success (Martin, 2013).

**Sustained silent reading**

One self-directed learning approach used by some students in silent study is sustained silent reading. This has been found to increase comprehension, measured by the number of correct answers on similar pre-test and post-test passages (Freeland, Skinner, Jackson, McDaniel, & Smith, 2000; Kelley, 2006). The gain in comprehension was less for students in higher grades (Freeland et al., 2000; Yoon, 2002). One small New Zealand boys’ school found 20 minutes daily of sustained,
silent reading improved students’ reading comprehension (McKinlay & Murcott, 2004). Reading comprehension was assessed with the Lexile Framework (https://www.lexile.com). Similarly, Nagy, Herman and Anderson (1985) found that sustained silent reading assisted gains in word knowledge and vocabulary. In silent study in the research school, boys may choose to do some silent reading, but it may not be sustained, nor is it compulsory and some students may go through the motions of reading but not engage (Freeland et al., 2000; Pierce, 2006). Silent study does provide ideal conditions for those who choose to utilize some of their time for some silent reading.

**Computers for study**

The use of computers is another self-regulated learning approach in silent study which varies according to student subject choice and teacher preference in provision of resources. Piazza (https://piazza.com/) is an on-line community of practice where extensive resources are provided, and student/student and student/teacher collaboration are fostered. The website indicates that Piazza is widely used by teachers for senior secondary school students. Facebook is sometimes used in the same way for student/teacher communication. A study of 178 Israeli teachers (Asterhan & Rosenberg, 2015) found students were a little wary of Facebook as an instructional device, and did not use it much. Using data obtained from 6444 high school students in Queensland, Australia, Smith, Skrbis, and Western (2013) compared their use of the Internet for academic purposes and for social media purposes like Facebook. They concluded that students were more likely to use the Internet for social media, including email, than they did for their academic work, and that use of social media increased as they got older. Males spent less time for both purposes. At the research school, social media use, apart from emails, is not permitted in any class. Therefore, communication with a teacher through Facebook must be done at home. Smith, et al. (2013) suggested variation in Internet use depended on whether it was favoured by the school or not. In silent study, the variation is enormous and subject related, to such an extent that some students spend most of their study time on the computer at school or at home, and Internet use is variable. Computer use is changing and has increased in the research school and in silent study over the last ten years, as some teachers now provide extensive on-line resources, and because some information is best found on-line.
Time spent on homework

As silent study is self-directed and self-regulated students are free to choose how they use the silent study time. For most students, much of the available time is spent on ‘homework’. The term ‘homework’ may include work set by the teacher but done at school rather than at home (Cooper, 1989a, 2007). There has been uncertainty in the literature about whether time spent on homework has a positive correlation with attainment at high school level (Kohn, 2007). The ‘time spent’ in homework research must be defined because it is usually self-reported. It may include time spent on just written tasks or it may include time spent on other types of learning. A cross-cultural study of 231 759 students studying mathematics in 9 791 schools and across 40 countries (Dettmers, Trautwein, & Lüdtke, 2009) found that the relationship between homework time and achievement was uncertain. The researchers stressed “the need to control for confounding variables” (Plant, Ericsson, Hill, & Asberg, 2005, p. 401) like socio-economic status and ability. Plant et al. (2005) also decided there was negligible or no relationship between the amount of time spent on study and academic performance. However, the amount of time spent was a good predictor of academic performance, if two other contributing factors were also considered – previous academic performance and the quality of study, that is, whether the levels of focus were enhanced. They argued that previous successful academic performance reflected established good quality study habits like long-term planning and sustained time commitment. Flunger et al. (2015) agreed there was only a modest association between time spent on homework and achievement. They argued that the constructs of time and effort must be considered simultaneously in this comparison. They further argued that high achievement results from “spending large amounts of time on homework…if the learning behaviour also involves high effort” (Flunger et al., 2015, p. 105). Others suggested better predictors of academic success than time spent on homework were prior knowledge and attendance. Fernández-Alonso, Suárez-Álvarez, and Muñiz (2015) stated that the effect of prior knowledge in predicting achievement was greater than that of any other variable they studied. Dollinger, Matyja, and Huber (2008) found that, compared with their low-ability peers, high-ability
students’ attendance was the factor that enhanced their examination performance most, not homework time.

Conversely, some research found the amount of time spent on homework correlated positively with attainment. Hallam (2004) and Trautwein (2007) suggested there was a positive correlation between homework and attainment. Using data from 22 countries, Gustafsson (2013) also decided there was a positive relationship. Cooper, Robinson, and Patall (2006) suggested ‘homework students’ outperformed 75 per cent of students not doing homework. Cooper (2007) concluded that ‘homework students’ correlated positively with attainment particularly for older students. Kalenkoski and Pabilonia (2016) reported a small positive effect for boys, but not for girls. The complexities of the debate and the different viewpoints highlighted by Cooper (2007) and Rudman’s (2014) literature review may be reconciled by recognising that these studies used different identification and treatments of the constructs that were involved in the relationship between time spent on homework and academic performance.

Factors which should be considered in homework research include ability, ethnicity, the school, socio-economic status, and motivational variables (Trautwein, 2007). Other factors include the availability of a suitable space, environmental factors like noise, other family members’ attitudes and behaviours, anything which may cause distraction, and the availability of appropriate resources like books, computers and access to the Internet (Cooper, 2007). For my research, the literature suggests the important factors in high academic attainment include not just time spent on learning, but also several other constructs like attendance, prior knowledge and perhaps quality of teaching, operating simultaneously. Motivation and effective study habits also play a particularly important role in academic achievement in Year 13. Although Trautwein (2007) found that students like those in the research school who are higher in the socio-economic scale achieve better when homework is set, Bas, Sentürk, and Cigerci (2017) found nothing significant to suggest that socio-economic status had any role to play in the effects of homework on academic success. Silent study for Year 13 students advantages all students by providing extra time that may be spent on homework, and because it is supervised, quiet, well-resourced, and attendance is checked, it encourages effective
use of time which can then have a positive effect on academic attainment. However, the silence does not permit collaborative learning.

**Silent study versus collaborative group work**

In the late nineteenth and early twentieth centuries, behaviourist theorists like Skinner argued that children learned by acquiring new behaviours, which were reinforced by some kind of stimulus, and consideration of mental processes was discounted (Pritchard, 2014). Educators looked for ways to examine and to modify behaviour. Rewards, incentives, sanctions, and punishments were considered a necessary part of the learning environment. In the first half of the twentieth century, a parallel branch of learning theory began to emerge, based on the belief that learners construct their own knowledge and understanding of their worlds (Pritchard, 2014). This became known as ‘constructivism’. Constructivists believe that the mind is active in making or constructing knowledge to make sense of what we experience (Schwandt, 2007). Piaget’s cognitive constructivism stressed that motivation was required to compare new information with what we already knew and understood (Pritchard, 2014). Piaget (1976, p. 12) argued that the construction of knowledge arises from interaction between subject and objects, that is “the external world”, but knowledge is also moderated by intelligence. He further argued that (1976, p. 12) “in order to know objects, the subject must act upon them, and therefore transform them” and concluded that (1976, p. 22) “there exist stages of development”.

For Piaget knowledge was stored as basic building blocks of information or ‘schema’ (Howes, 2013) which we use to invent concepts or models or use as ‘bridges’ in order to “make sense of experience” (Schwandt, 2007, p. 38). Piaget saw the child as a lone scientist making sense of their world (Gordon, 2008). This is a well-founded description of a student in silent study. Accepting Piaget’s theory, silent study provides space and time for reflection and learning whereby students are assimilating the information gained in class and trying to fit it into the schema they already have or using it to adapt existing schema. Another strand of constructivism with a broader view of learning
is social constructivism which implies learning and understanding are constructed or mediated through essentially social, cultural and interactive processes (Palinscar, 2005; Schwandt, 2007).

A major influence in the theory of social constructivism in relation to learning was the Russian psychologist Vygotsky. Vygotsky’s research showed that “the mind is not a complex network of general capabilities…but a set of specific capabilities, each of which is, to some extent, independent of the others and is developed independently“ (Vygotsky, Cole, John-Steiner, Scribner, & Souberman, 1980, p. 83). Vygotsky pointed to three major factors (Gredler & Shields, 2014; Pritchard & Woollard, 2013) in cognitive development. First, other individuals around the individual learner have a crucial role in their learning; second, these people have a major influence on the learner’s worldview; and third, factors like other people, culture, and language affect the progress of “learning and intellectual development” (Pritchard & Woollard, 2013, p. 35).

Vygotsky suggested three types of task for learning which are central to young peoples’ broader patterns of learning through socio-cultural engagement. These are first, independent tasks which a student can perform without any help from others; second, those which a student cannot perform even with support from another person; and third, those tasks which are in between the two extremes (Pritchard & Woollard, 2013) and for which a student needs help from another person to perform successfully. It is only the first type that can be advanced in silent study. The second task remains elusive to a student in silent study. The third type of task may have been advanced in subject classes prior to coming to silent study but cannot usually be advanced further, as help is not available in silent study except on-line. In silent study, the independent learning can be pursued while the negotiated learning is still fresh.

Vygotsky’s theory is supported by a common learning process for Year 13 boys as in the following example. Learning happens first at the social level in the mathematics classroom (third type), and homework is set to consolidate learning that has already happened (first type, and for some third type). At the individual level, a mathematics problem that is not too complex and able to be done independently can be solved in silent study to advance learning. Then as for Vygotsky again, the
learning may be further developed in a social context outside silent study, by comparing answers, or having work marked, or critiqued, and perhaps finding a better method in the process.

Jerome Bruner’s view that “learning is an active social process” (Pritchard & Woollard, 2013, p. 16) was influenced by Vygotsky. Both emphasised that learning is socially constructed, and adults or more knowledgeable peers assist the development of skills in children who are active in the learning process (McLeod, 2012). For Bruner, similarly, the development of concepts is continuous, and learning is much more than mastering facts. Bruner maintained that learners construct new ideas and concepts, or transform information, by building on what they already know (Pritchard & Woollard, 2013). In his view, “man’s intellect then is not simply his own, but is communal in the sense that its unlocking or empowering depends upon the success of the culture in developing means to that end” (Bruner, 1971, p. 7). Bruner (2007, p. 51) saw mental development “as involving the construction of a model of the world in the child’s head, an internalized set of structures for representing the world around us”.

For Bruner, when teacher and pupils engage in active dialogue in contexts of formal learning, the aim should be “to encourage pupils to discover principles for themselves” (Pritchard & Woollard, 2013, p. 15). The time given to silent study may assist this aim, enabling students to reflect on knowledge gained in class sessions via the active dialogue and giving them time to advance their knowledge and skills. Learning that happens in silent study is not collaborative or shared, as is the greater part of the learning for a Year 13 boy, but rather it is a solo experience, although it may have been jointly constructed earlier and/or be shared later.

There are many benefits in the development of collaborative learning skills (Laal & Ghodsi, 2012) and these are recognised and catered for Year 13 students in class. Silent study does not permit collaborative group work. Therefore, collaborative learning skills are not developed there. This may or may not be a disadvantage. Kirschner, Paas, Kirschner and Janssen (2011) studied the effectiveness and efficiency of the individual and collaborative learning approaches for 140 Dutch high school students studying biology. The term ‘cognitive load’ is “the amount of mental effort
that a learner expends” (P. A. Kirschner, Ayres, & Chandler, 2011, p. 102). F. Kirschner et al. (2011, pp. 587, 596) assumed problem solving involved a higher “cognitive load” or cognitive demand than does studying “worked examples”, providing the problems were too complex to be done easily by an individual. They argued that if tasks were not complex, as in studying worked examples, individual learners had the capacity to do the tasks on their own, and this was as effective as a collaborative approach. For problem solving tasks, the collaborative approach meant the cognitive load “could be distributed across” all members of the group (F. Kirschner et al., 2011, p. 596). They concluded that “wholesale adoption of collaborative learning is not a sensible educational practice” (F. Kirschner et al., 2011, p. 597). They further concluded that:

for students learning individually, instruction emphasising worked example study is more effective and efficient than instruction emphasising solving problems while for students learning collaboratively, instruction emphasising problem-solving is more effective and efficient than instruction emphasising worked example study. (F. Kirschner et al., 2011, p. 596)

Students often use silent study to study worked examples. Silent study provides an opportunity to do homework at school, but without collaboration. Constructivist theories of learning recognise that collaboration with homework can be a most useful process to aid understanding, and it is the method of choice when there is difficulty in understanding coursework at school or at home (Carter, 1999; Jian, Sandnes, Huang, Cai, & Law, 2008). Collaboration has been shown by research to have worked well for learning, for example, in mathematics (Dhlamini & Mogari, 2013; Sears & Reagin, 2013). When complex problems, particularly in mathematics, are not understood in silent study, collaborative or other help must be obtained outside silent study.

Laal and Ghodsi (2012) carried out an extensive search of the international literature and found a large number of social, psychological, academic, and assessment benefits arising from collaborative learning. They (2012, p. 489) concluded that collaborative learning “compared with competitive and individualistic efforts, has numerous benefits and typically results in higher achievement and
greater productivity, more caring, supportive, and committed relationships; and greater psychological health, social competence, and self-esteem”. There are further benefits for some cultures, for example Māori, where the contribution to the group in a cooperative learning environment is considered more important and more valuable than individual learning (Caddick, 1997). Students from different cultural backgrounds may respond differently to the silent study learning environment.

Most learning is socially constructed in a collaborative process. Year 13 students studying complex material need time to internalise their learning. The learner, beyond the lesson or teaching moment, might still pause, digest, consolidate and reinforce information, practice learned methods and make complex material his or her own. Learning and understanding experiences within the classroom setting must be followed by a time to assimilate, reflect on and evaluate such experiences (Zimmerman, 2013). Silent study may provide appropriate conditions for this to happen for some students.

Reichert and Hawley (2009, 2010) completed a study from 2008-9 commissioned by the International Boys’ School Coalition which involved around 18 boys’ schools in Australia, United States, New Zealand, Canada, England, and South Africa. They examined what worked best for boys in boys-only schools in six English-speaking countries. They found that boys in their last year of secondary schooling in those schools liked to be “given the opportunity, time and room to carry out an assignment or solve problems on their own” (Reichert & Hawley, 2010, p. 115) without teacher intervention or peer involvement; they wanted “to figure it out for themselves” (Reichert & Hawley, 2010, p. 116). Kackar, Shumow, Schmidt, and Grzetich (2011), and Leone and Richards (1989), similarly reported that high school boys prefer to do their homework alone. Conditions present in silent study are individual work and silence (with no distractions) both of which may assist in individual problem-solving of this kind. Further collaborative learning with peers or teacher can then reinforce the learning. This is at its best when a successful relationship exists with the ‘helper’.
Teacher/student relationships

In the Reichert and Hawley (2009, 2010) research discussed in the last section the authors found participants liked teachers who were approachable, trustworthy, understanding, and respected. The participants were astute and accurate in sizing up their teachers (Reichert & Hawley, 2010). Boys and teachers were asked to “describe a lesson or classroom observation that worked” (Reichert & Hawley, 2009, p. 3) and they then completed an on-line “open-ended and minimally demanding survey” (Reichert & Hawley, 2009, p. 6). The researchers described the boys detailed and careful study of their teachers. Teachers were divided into two categories: firstly, teachers who “conveyed a welcoming friendliness” and, secondly, “teachers whose classrooms were more structured, firmly directing and demanding” (Reichert & Hawley, 2009, p. 218). The numbers in each category were about equal. Reichert and Hawley’s (2009, 2010) research also suggests it is important for teachers to find ways to establish a good relationship with students. In the classroom, a good relationship can be quickly established and maintained through daily communication and interaction. In silent study with less communication and interaction with students this is more difficult, but it is still necessary.

From a study of 3 773 students from thirteen Australian high schools, Martin (2003) found inter alia an effective teacher/student relationship was a particularly critical factor in promoting good motivation and engagement. Participants indicated good relationships existed where an individual subject teacher tried to get to know them, listened to them, respected their views, and treated them as adults. In addition, in classrooms where there was a good relationship, the teacher had a good balance between serious work and a classroom atmosphere that was relaxed and permitted fun when appropriate. The same would be true of the Study Centre.

Relational teaching is defined as teaching based on successful teacher/student relationships “that embody qualities of trust and mutual respect” (Reichert & Hawley, 2009, p. 216). Reichert and Hawley’s (2013a) action research study of relational teaching in 35 schools across 6 countries found that effective teacher-student relationships enhance student engagement and academic performance. They found eight teacher qualities that were central to the success of the positive relationship:
teachers who reached out, often improvising a measure to do so; teachers who knew their subject and maintained consistent expectations of students; teachers who responded to a student’s interest or talent; teachers who shared a personal interest (like robotics) in common with a student; teachers who shared a common characteristic like a physical feature or ethnicity; teachers who were willing to share a personal experience; and teachers who were restrained and civil when faced with oppositional behaviour; and teachers who could reveal vulnerability.

Reichert and Hawley (2013b, p. 50) reported from the same study, “Boys stressed their appreciation and admiration for teachers who established clear expectations, held them to high, (but attainable), standards and, through various affective gestures, convinced them that they could succeed in meeting them” (p. 50). Reichert and Hawley (2013b, p. 52) also reported that where relational breakdown occurred, boys’ perceptions attributed this to course material and performance expectations being unclear; teachers lacking interest in the students; teachers being “inappropriately angry, judgmental, sarcastic, and authoritarian”; and to teachers being unable to keep order and to make the classroom climate emotionally safe. Reichert and Hawley (2013a, p. 29) also found that “boys valued teachers’ ability to establish a positive and respectful climate for the whole class”. In the research school, the largest silent study class in 2004 was around 100 students, the room was large, the supervisor did not teach the boys, the boys found it distracting if he moved around the room, and supervisor/student relationships were established in other ways, before or after the study sessions, or outside them. Yet, for successful management, effective relationships were vital. The supervisor needed to have high expectations, but also needed to trust students, be positive, relaxed and to display a sense of fun.

Parents and autonomous learning

At senior secondary school level schoolwork becomes more complex, and Cooper’s (2007) research suggests at this level, parents should act as mentors to encourage their child to become autonomous learners. A meta-analysis of thirty-seven studies (Castro et al., 2015) indicated three parental involvement factors correlated positively with high academic achievement - parents with high expectations, parents who communicated with their children about schoolwork, and parents who
fostered good reading habits. A meta-synthesis (Fan & Williams, 2010) came to the same conclusion and also agreed with Castro et al. (2015) that parental assistance with homework did not generally improve achievement, and could have a negative effect. Both studies found effects were the same across all grades.

High achievement is positively influenced where parents provide a structured setting or management rules for completing homework (Cooper, 2007). Parents can often assist students’ homework to be productive by providing an appropriate study space, and ensuring access to texts (Cooper, Lindsay, & Nye, 2000) and Internet resources (Katz, Lee, & Byrne, 2015). These things are also desirable in silent study. Access to computer resources including Internet is usually available in silent study, but on request, and subject to availability, which is more of a problem in larger study classes.

Cooper, Lindsay, and Nye (2000) found that children of those parents who supported the autonomy of their children for homework, or did not interfere with that autonomy, achieved more highly on either standardised tests or in class grades. Such parents also indicated their children completed more of the set homework assignments. Children of parents who reported that they were regularly directly involved in their child’s homework achieved less. The authors suggested that this indicated that parents should be supportive of the child’s autonomy in their learning. Parents of high school female students reported more involvement in homework than parents of male students. The authors suggested “this result may suggest that as children grow older, males are expected to become more autonomous” (Cooper et al., 2000, p. 483). The research suggests that the supervisor (in loco parentis during school study time) should encourage autonomous learning, and not interfere unnecessarily in individual student learning.

In the home environment, peers, or an older sibling may be available to assist when an individual has difficulties in understanding something that is complex (Aaen & Dalsgaard, 2016; Xu & Corno, 2003). However, Aaen and Dalsgaard (2016) found peer assistance occurs most commonly via Facebook. As discussed previously, Facebook is not available at school, although another use mentioned previously is for teacher/student subject-related communication. This raises the question
of whether senior secondary students could be trusted to use Facebook or similar software at school for academic purposes. Some teachers in the research school use Facebook for communication with their students.

**Distractions in home study**

This section relates to distractions from study at home for comparative purposes. The research school students have a considerable amount of homework. It is assumed that this will occupy, on average, three hours per night, although some or even all of this may be done in silent study. In the home setting, successful Year 13 students need to resist distracting temptations like watching television or social interactions with friends, in order to stay focused on the task of homework (Bembenutty & Karabenick, 2004). If this is done, there is a better chance that homework can be completed on time. Bembenutty and Karabenick (2004) and Bembenutty (2011a, 2011c) have developed the concept of ‘academic delay of gratification’ (Bembenutty, 2011a, p. 9) from a study of 250 American college students (Bembenutty, 2009). This “refers to students’ willingness to postpone immediately available opportunities to satisfy impulses in favour of academic goals that are temporally remote, but ostensibly more valuable” (Bembenutty, 2011c, p. 463). Thus academic delay of gratification can be regarded as part of a self-regulated learning strategy but it is also related to an individual’s self-efficacy, and their hopes and aspirations for the future (Bembenutty & Karabenick, 2004). Students who report a greater academic delay of gratification have been found to have greater academic success (Bembenutty, 2011a).

Bembenutty (2011c) found several ‘maladaptive practices’ (his term) that students could engage in which divert them from the demands of homework. These included daydreaming, procrastination, pessimism (all three possible in any learning situation including silent study); television, cell phone calls, text messages, Facebook, Twitter, other social media; distractions like YouTube and those resulting from undisciplined Google searches; and working in a room or café where there was too much noise. Others were social commitments, too much overtime in after-school work, and trips of various kinds. He stated that his “findings put homework at the center [sic] of the educational self-
regulatory process” (p. 470). Bembenutty (2011c), examining both meaningful and maladaptive homework practices, also found that those individuals identified as highly self-regulated learners had high self-efficacy beliefs, were willing to delay gratification, had an intrinsic interest in their subjects, and had a pro-active approach to homework completion. Some practices Bembenutty (2011c) classifies as ‘maladaptive’ can be used responsibly and wisely to aid learning or socialising, but they also have the potential to waste a considerable amount of time or even to be harmful (Asterhan & Rosenberg, 2015; Junco, 2012; P. A. Kirschner & Karpinski, 2010).

Some maladaptive practices (self-handicapping distractions and gratifications) perhaps sometimes present during homework study (Bembenutty, 2011c) are either not available, or difficult to access, in silent study. It is easier for students to stay on task in silent study than at home, as silent study limits choice that might impact negatively on the effectiveness of individual study. Wise choices are those that are appropriate for a particular learning activity, using a minimum of time and resulting in effective learning. Student autonomy is less evident in silent study than at home. However, these practices still need to be identified for this research because the absence (or difficulty of access) of maladaptive practices may be contributing factors to the success or otherwise of school silent study compared with homework done at home. One possible source of distraction at home is media multitasking and particularly the use of Facebook.

**Facebook and media multitasking**

Media multitasking is on the rise with young people (Lee, Lin, & Robertson, 2012). An example is surfing the web, while completing a history assignment, with music playing in the background, and with a cell-phone at the ready. Calderwood et al. (2014) found a considerable amount of study time was wasted in off-task distractions from media multi-tasking. Homework distraction from social media has a negative effect on learning (Xu, 2010). Lee et al. (2012) found that less information is retained by students in a multi-tasking learning environment especially when they may be dealing with unfamiliar content. Their findings supported the view that students acquire more knowledge if they focus on one task at a time (Lee et al., 2012). However, a systematic review of articles
concerning problematic Internet use (Moreno, Jelenchick, Cox, Young, & Christakis, 2011) disagreed and concluded that evaluation of the effect at present was incomplete. Multi-tasking is not usually possible in silent study.

Facebook use at home is common with Year 13 students. Judd (2013) found Facebook users were more inclined to multitask. Therefore, their learning was less focused. Other possible negative effects on the process of learning were the subsequent depression and social anxiety. He suggested social media multitasking is better left to breaks between suitable periods of study. Junco (2012) determined that time spent on Facebook strongly and negatively impacted on academic performance. In a study of college students Calderwood et al. (2014) showed Facebook use and texting in class had a negative effect on academic grades. P. A. Kirschner and Karpinski (2010) found from a study of 140 high school students in the Netherlands that Facebook users spent fewer hours per week studying and had significantly lower academic grades, but they also reported that Facebook users tended to be more involved in extra-curricular activities. Therefore, they suggested more research is required:

The use of FB – and other social networking software – is a multifaceted phenomenon where there are many factors that can influence each other. This research only exposes the tip of this iceberg, but as with all icebergs – though we cannot see what is under the tip – we know it’s there and we know that it can wreak havoc if not heeded. (P. A. Kirschner & Karpinski, 2010, p. 1245)

Study time at home can be wasted when students are distracted by social network technologies, and this time wasted can escalate if personal issues result from unwise actions online. An example is posting inappropriate material including images and personal material on Facebook. In regard to this, van Manen (2010) expressed concern about social network technologies being used unwisely. He described them as “surprisingly compelling and addictive to their users” and stated that “sharing personal information can be unexpectedly risky” (van Manen, 2010, pp. 1025,1026). He further observed “Many young people do not realise (or do not care) that whatever they put online can no
longer be withdrawn and controlled” (van Manen, 2010, p. 1026). This is another reason the research school has restrictions on the availability of Facebook and other social media sites on school computers. The New Zealand Government Harmful Digital Communications Act 2015 was developed out of concern for the effects of ill-considered digital communications (New Zealand Government, 2015). The legislation warned against digital communication disclosing personal information, being threatening or offensive, making false allegations or breaching confidences, being indecent, obscene, or racist and denigrating individuals for reasons of religion, or gender or sexual orientation, or disability.

Some Year 13 students have music playing some or all the time while they study at home. Listening to music for certain tasks, for brief periods, while studying is not necessarily bad, and some students may sometimes study better with music (Kotsopoulou & Hallam, 2010). Calderwood, Ackerman, and Conklin (2014) reported that on average, college students spent 73 minutes in a three hour homework session listening to music, and, in addition, wasted 25 minutes in other distractions from social media. Analysis of video recordings of participants revealed that the average proportion of time wasted in engagement with distractions was 14 per cent, but for the 59 per cent who listened to music it was over 40 per cent. Kotsopoulou and Hallam (2010, p. 438) found the self-reported reasons for playing music while studying were “to relax, alleviate boredom, and to help concentration”.

The research school has a policy that cell phones must be switched off in class. Beland and Murphy (2015) found a school-wide ban on the use of mobile phones in class improved sixteen-year old student test scores by 6.41 per cent of a standard deviation. Further, such a ban did not affect high achievers significantly but improved the performance of low achievers by 14.23 per cent of a standard deviation. They concluded that high achievers (most of the population for my research) can focus regardless of the presence of cell phones. While making calls and texting would affect others and should not be permitted, other use like taking a photograph of missed work would not affect others.
Summary, implications, and conclusion

This review examines aspects of boys’ learning that impinge on silent study and indicate the complexity of the topic. Overall the evidence suggests silence for learning can be used to benefit and encourage individual inner reflection leading to intellectual engagement and creativity. While limited recent literature is available to confirm earlier literature that suggests homework may have a slightly greater positive effect on achievement than in-school study, recent literature also suggests this may not be so for the participants in this study for several reasons. The compulsory silent in-school study is supervised, and the school is a boys-only school which has a positive school culture. School expectations for achievement are high, and the generally motivated and engaged students are from high socio-economic homes with related advantages, particularly being more likely to have developed strong self-regulation skills which give them an advantage at secondary school, including more effective self-regulated work in silent study. Silent study should improve attainment because it can increase the time spent on homework, and the literature shows time spent correlates positively with achievement. Silent study has an advantage over homework of fewer possible distractions (particularly social media, and multi-tasking) than home study because of Facebook, cell-phones, and multi-tasking. It has the comparative disadvantage that while the literature clearly indicates complex tasks are best learned in collaboration with other students, this is not generally possible in silent study except on-line. Much of the extensive research commissioned by the International Boys’ Schools Coalition has reached the consensus that good management of any classroom requires effective teacher/student relationships, and in silent study this should also be true of supervisor/student relationships.

Compulsory silent study does not appear to feature in the literature and is possibly unique or at least very rare in secondary schooling today (H. Cooper, personal communication, 27 October 2016). This review has confirmed the importance of silence, wise choice, self-regulation, self-control, and good relationships to assist in making silent study effective and useful. It focuses on the under-lying meanings of the lived experience of silent study by going beyond the perceptions of those experiencing the phenomenon. The next chapter introduces the theoretical (philosophical)
framework to assist me to find a way to understand, interpret, and evaluate silent study by drawing on the wisdom of selected philosophers.
Chapter 3 Theoretical perspective

This chapter discusses the theoretical perspective for the research. The theoretical perspective concerns the philosophical underpinnings of the research which inform the methodology for the research (Crotty, 1998). Discussion of human science research and lived experience is followed by other historically-ordered philosophical underpinnings influencing the research. The methodology and method are discussed in Chapter 4, and Chapters 3 and 4 together establish a conceptual and methodical framework for the research.

Human science enquiry

This research looks for the meaning of silent study as a phenomenon for Year 13 boys and is best described as human science research. Human science is a collective term, derived from the work of Dilthey (1976) for a range of research orientations and approaches (van Manen, 1997b). Dilthey argued that human science deals with mental, social, and historical aspects of phenomena. Human science research requires interpretation and understanding whereas natural science enquiry mainly requires observation and explanation (Rickman, 1976; van Manen, 1997b). Van Manen (1997b, p. 181) described human science research as “the study of meaning: descriptive-interpretive studies of patterns, structures and levels of experiential and/or textual meanings”.

There is an unavoidable difficulty in human science research – the challenge of trying to capture accurate accounts of subjective experience. Research participants’ descriptions are formulated by recalling what happened during the experience under investigation but are collated only after it had been experienced. For example, Westfall-Greiter and Schwarz (2012) explored what they called the ‘articulated’ (spoken or seen) or the ‘unarticulated’ (unspoken or unseen) appeal from children for a teacher response in a classroom setting. They spoke of the difficulty of trying to capture an experience amid the event:

- In seeking to gain insight into educational processes and learning through the lived experiences of…students…we as researchers were…faced with the dilemma of planning for
the unplannable. How can we capture the experiences of others, of children at school *in medias res* [amid an event]? How can we see what is there, rather than what we assume is there? How can we manage to capture more than we see?” (Westfall-Greiter & Schwarz, 2012, p. 122).

The authors collected poignant vignettes as their main research instrument. Van Manen (1997b) described such vignettes as ‘anecdotes’ or ‘stories’ which he advises are useful in human science research. This silent study research contains two vignettes in Chapter 8 and the Epilogue.

Van Manen (1997b, p. 22) argues that human science research “cannot show or prove” that one particular method “is more effective than another” method or even make generalisations about methods or practices. In fact “the tendency to generalize may prevent us from developing understandings that remain focused on the uniqueness of human experience” (van Manen, 1997b, p. 22). However, not generalizing does not exclude finding patterns, consistencies and establishing relationships when reflecting on participants’ descriptions. Understanding is developed while remaining open to the experience as lived, and abstaining from “theoretical, polemical, suppositional, and emotional intoxications” (van Manen, 2014, p. 222).

A qualitative approach was chosen for this study because it was the best fit with research questions that sought to understand participants’ lived experiences of the phenomenon of silent study. A qualitative methodology accommodated the flexibility needed to address anything unexpected that might be uncovered at any stage of the research (Hill, 2007; Marshall & Rossman, 1999; Zimmerman, 2013). This social enquiry research sought an interpretation of the nature of the lived experience of silent study based on participants’ experiential descriptions. It elucidated an experience “which is usually hidden or veiled” (van Manen, 1997b, p. 27) by adopting a “reflective attitude” (van Manen, 1997b, p. 64). For van Manen (1997b) and for me, the interpretation is the researcher’s phenomenological description, emerging and structured after reflection, but not decided in advance.
Any enquiry into human experience can utilise as data the spoken word, the written word, and artistic works, together with observation and reflection, to inform a phenomenological description. Because life experiences are forever changing, so are the descriptions. The researcher must recognise this and ensure the research report uses “the full measure and complexity of the language and prose and the poetic, the cognitive and the pathic” (van Manen, 2014, p. 29) to capture the inherent character of the lived experience. In this context, the pathic “refers to the general mood, sensibility, and felt sense of being in the world” (Van Manen, 2011b, p. 1). This approach requires an empathy with participants, the ability to ask the right questions including supplementary questions, and good writing skills (van Manen, 1997b).

**Researching lived experience**

Lived experiences are “our situated, immediate, activities and encounters in everyday experience, pre-reflexively taken for granted as reality rather than as something perceived or represented” (Chandler & Munday, 2014, p. 1552). My lived experience research is phenomenological in orientation. As a research approach phenomenology “is the study of phenomena, that is, of the objects of human experience…It elucidates what people experience” (Crotty, 1996, pp. 3-4). Phenomenology seeks a deeper understanding of the nature or meaning of lived experiences for a group of individuals (Creswell, 2007; van Manen, 1997b); “phenomenological research is the study of lived experience” (van Manen, 1997b, p. 9). This research fits within the field of hermeneutic phenomenology which is the theory and practice of interpreting texts to understand lived experiences from the perceptions of participants (Gadamer, 1960/2012, 2006; Gadamer & Grondin, 2006). Phenomenological research begins in the lifeworld, that is, the world of lived experience. Since it involves studying and reflecting on written or spoken words about a phenomenon, and then writing about the phenomenon, hermeneutic phenomenology is “fundamentally a writing activity” (van Manen, 1997a, p. 7), where the written description is inseparable from the reflection (van Manen, 2014, p. 365). Hermeneutic phenomenology is particularly suited to the minutiae of any research situation, and it can utilise the knowledge possessed by teachers in areas that are rarely researched (Henriksson, 2012).
The traditions of phenomenology and hermeneutics inform this study, bearing in mind that they are separate entities. As a philosophy, phenomenology is complex and multi-faceted (Schwandt, 2007). There is “not a single unified philosophical standpoint” (Schwandt, 2007, p. 225). Three German philosophers are cited in this study. Each reference is an up-to-date English translation from the German of the original work. Edmund Husserl (1859-1938) was an early philosopher. His student Martin Heidegger (1889-1976) expanded and developed Husserl’s theories and his magnum opus Being and Time (1927) was an important influence in this study. The third philosopher, author, and Heidegger’s student, Hans-Georg Gadamer (1900-2002) was just as important, and particularly his work Truth and Method (1960). The influences of each will be discussed later in this chapter. There are two main approaches to phenomenological study – hermeneutic (or interpretive) phenomenology and descriptive phenomenology. Hermeneutic phenomenology is best known through the work of Hans-Georg Gadamer (1960/2012) which was developed from the philosophical work of Martin Heidegger (1927/2008). Hermeneutic phenomenology focuses on “interpreting the ‘texts of life’ (hermeneutical) and lived experience (phenomenology)” (Creswell, 2013, p. 284). Descriptive phenomenology derives from the work of Alfred Schütz (Schwandt, 2007), which was developed from the philosophical work of Edmund Husserl (Moustakas, 1994). It focuses on experiences as they emerge in the consciousness of each living individual. In descriptive phenomenology, all pre-understandings, assumptions, and biases are put aside in a technique termed ‘bracketing’. Husserl, often called “the father of phenomenology” (van Manen, 1997b, p. 175) but also a mathematician, borrowed the term from mathematics. My mathematics background tells me to solve 2[2+3] I deal with what is in the bracket first and use the answer to complete the calculation. What was in the bracket is eliminated. Crotty (1996, p. 20) defines bracketing as “a sincere endeavour not to allow one’s beliefs and assumptions to shape the data collection process and a persistent effort not to impose one’s own understandings and constructions on the data”.

My research uses the hermeneutic phenomenological approach and assumes that while pre-understandings can be temporarily put aside or suspended in data collection and in reflecting on the data, pre-understandings and biases cannot be permanently denied and may be engaged later in the
research process in interpreting the data. This is a more sympathetic view of bracketing than that adopted by descriptive phenomenologists, which “is rarely perfectly achieved” (Moustakas, 1994, p. 90) anyway. Creswell (2013) agrees with LeVasseur (2003) in suggesting a new definition of bracketing is needed “such as suspending our understandings in a reflective mood that cultivates curiosity” (Creswell, 2013, p. 83). This stance of suspending understandings rather than trying to eliminate them altogether is consistent with established practice in hermeneutic phenomenological research (Creswell, 2013; Finlay, 2013a; LeVasseur, 2003). It is also consistent with Gadamer’s (1960/2012) philosophy which underpins my research, as discussed later in this chapter. This temporary “brushing away or suspending” (van Manen, 2014, p. 41) of pre-understandings is done in order to make sensitive, reflective contact with the lived experience. Van Manen (1997b) suggests hermeneutic phenomenology is both descriptive and interpretive. It is descriptive (phenomenological) because it is “attentive to how things appear” and wants to let them “speak for themselves” (van Manen, 1997b, p. 180). It is interpretive (hermeneutic) because it claims all phenomena are capable of being interpreted and the “‘facts’ of lived experience” (van Manen, 1997b, p. 181) need to be expressed in language – an interpretive process. Finlay (2009, p. 22) sees “description and interpretation as a continuum where specific work may be more or less interpretive” and accepting this allows for flexibility in this research. The next section considers how hermeneutic phenomenology has been influenced and developed by scholars and thus become useful for research today.

**Philosophical developments underpinning hermeneutic phenomenological research**

**Hermeneutics**

Hermeneutics is derived from the Greek *hermeneutikos* which means *to interpret* (Palmer, 1969). Hermeneutics is generally taken to refer to the “art, theory and philosophy of interpreting the meaning of an object” (Schwandt, 2007, p. 136) like a text, a speech or a work of art (Palmer, 1969; Schwandt, 2007). It has provided and still provides “theories, principles, rules and methods” (Crotty,
for scholars who engage in the interpretation of scriptures. “The actual explanation of what a biblical text means is known as exegesis” (Crotty, 1998, p. 87) or analytical interpretation. Hermeneutics provides guidelines for interpreting transcribed texts of interviews and even the spoken word where the meaning is “disputed or not immediately apparent” (Sharkey, 2001, p. 20).

A researcher’s interpretation of the meaning of a text involves going beyond what is written in the text to ‘unmask’ the meaning and intention of the author writing about the experience (Moustakas, 1994). The text provides a description of a phenomenon, but a method of “reflective interpretation…is needed to achieve a fuller, more meaningful understanding” (Moustakas, 1994, p. 10). The process can be likened to reading a piece of poetry and developing a better appreciation of its meaning through reflection. Another guideline is Dilthey’s belief that researching human experience requires not only studying participant descriptions but also studying historical groundings (Moustakas, 1994). The hermeneutic circle, its development and enhancement, provides a valuable theory for guiding interpretation and is discussed later in this chapter.

**Schleiermacher and Dilthey**

Schleiermacher is regarded as the founder of modern hermeneutics in that he “extended hermeneutics beyond the realm of biblical exegesis” (Crotty, 1998, p. 92). He saw hermeneutics as a general “‘science’ or ‘art’ of understanding” (Palmer, 1969, p. 40). For him it was “a general body of methodological principles which underlie interpretation” (Palmer, 1969, p. 46). Schleiermacher proposed that a researcher had to understand a text before it could be interpreted. This involves considering each part of a text in relation to the whole text. Schleiermacher developed the concept of the ‘hermeneutic circle’ as a movement between the parts and the whole of a text in order to understand it, and then interpret it (Schwandt, 2007). To understand the meaning of the whole text one should consider the individual parts and vice versa. Schleiermacher’s hermeneutic or interpretative circle is a methodological device.

Dilthey is a central figure in modern hermeneutics. Like Schleiermacher he also understood hermeneutics to be a methodology for the human sciences (Crotty, 1998). For both Dilthey and
Schleiermacher hermeneutics relates to “a general theory of linguistic understanding” (Palmer, 1969, p. 68). Dilthey gave hermeneutics a philosophical grounding (Moustakas, 1994; Rickman, 1976). Human studies for Dilthey had to be based on hermeneutics. Hermeneutics was “the subjective understanding needed to deal with historical, social, and cultural knowledge, as distinct from the explanation required in objective, scientific method” (Chandler & Munday, 2016, p. 1552). Meaning is an historically conditioned phenomenon, and meanings are subject to change over time, as parts of our experience of an object change. This idea was the foundation for Gadamer’s concept that all understanding is self-understanding, that is personal, subjective, and open to changing options until the meaning ultimately becomes clearer through sustained reflection (Gadamer, 1960/2012; Palmer, 1969).

**Heidegger**

Heidegger (1927/2008) asserted that to be authentic, phenomenology must be hermeneutical in approach, (Palmer, 1969). Unlike the earlier philologists Heidegger (1927/2008) did not see hermeneutics as a rule-bound methodology for interpreting texts (Crotty, 1998). Rather he saw hermeneutics as ontological. He redefined hermeneutics as a “phenomenological explication of human existing itself” (Palmer, 1969, p. 42) or of ‘Dasein’. Heidegger (1927/2008) referred to the German term *Dasein* as “existent Being-in-the-world” (p. 488). *Dasein* “means literally ‘being-there’” (Crotty, 1998, p. 119) or “the locus where Being manifests itself” (Crotty, 1998, p. 120). Van Manen (1997b, p. 116) explained this Heideggerian term *Dasein* as referring to “that entity or aspect of our humanness which is capable of wondering about its own existence and enquiring into its own Being”. The dominant question throughout Heidegger’s philosophy was ‘What is the meaning of being?’ His seminal work *Being and Time* (1927/2008), was an attempt to answer this question in relation to lived experiences, and in his construction ‘Being’ defies a simple definition. Being “may be seen as Heidegger’s fundamental term for his ontological analytic” (van Manen, 1997b, p. 175), that is, how we make sense of the nature or meaning of something. Heidegger further argued that the phenomenon of consciousness is not set apart from the world, but is formed by social, cultural and political experiences (Laverty, 2003; Palmer, 1969).
For Heidegger, understanding is self-understanding, not an understanding of an object or subject, but rather a personal understanding – a moment when one’s view of the world becomes transformed. “In every understanding of the world, existence is understood with it, and vice versa” (Heidegger, 1927/2008, p. 194). (Crotty, 1998, p. 97) explains that:

Heidegger’s hermeneutics starts with a phenomenological return to our being which presents itself to us initially in a nebulous and undeveloped fashion, and then seeks to unfold that pre-understanding, make explicit what is implicit, and grasp the meaning of Being itself.

My research is Heideggerian in its approach because of the aim to understand the lived experience of silent study through participants as self-understanding beings. It further aims to transform the reader’s understanding by illuminating the essential meaning of the phenomenon of silent study.

**Gadamer**

Gadamer extended Heidegger’s work into practical applications by developing a new philosophical perspective in *Truth and Method* (Gadamer, 1960/2012). Gadamer (2006, p. 46) called this different way of understanding *philosophical hermeneutics* - the “theory of understanding”. It is also called *ontological hermeneutics* (Schwandt, 2007). Gadamer (1960/2012, p. 157) defined hermeneutics as “the classical discipline concerned with the art of understanding texts”. He saw interpreting texts for meaning as situational, subjective, and the interpretation as not being objective (Chandler & Munday, 2016; Frieson, 2012). He was critical of the views of Schleiermacher and Dilthey, who regarded it as a methodology for obtaining knowledge in human science research (Schwandt, 2007). As with Heidegger, understanding for Gadamer was ultimately self-understanding, or personal understanding. Informed by Gadamer’s philosophical hermeneutics, my research seeks to improve or enhance understanding of the lived experience of silent study by interpreting participants’ experiences of the phenomenon.

Understanding of anything is deepened by any related experience or ‘event’ and “the concept of self-understanding a historical concept” (Gadamer, 1960/2012, p. 523) and not “something onepossesses and controls” (Gadamer, 1960/2012, p. 522). Since “self-understanding always occurs through
understanding something other than the self” (Gadamer, 1960/2012, p. 83) self-understanding must not be allowed to affect or be affected by the process of negotiation of understanding. When the phenomenological description is sufficiently developed to present it in writing, this is as the researcher’s self-understanding. Gadamer maintained that to understand a text, one should keep one’s own prejudices at a distance when considering the expected meaning suggested by the text, as soon as it is rejected by the sense of the text itself...Explicating the whole of meaning towards which understanding is directed forces us to make interpretive conjectures and to take them back again. The self-cancellation of the interpretation makes it possible for the thing itself – the meaning of the text – to assert itself. (Gadamer, 1960/2012, p. 461)

This concept of self-understanding is a most important concept for this research. It imposes a rigour of its own – that of “uninterrupted listening” (Gadamer, 1960/2012, p. 461). My extensive experience with interviewing students as a school administrator meant this was not found to be a complicated process. While examining the text, and keeping pre-understandings at a distance, the researcher makes “interpretive conjectures” (Gadamer, 1960/2012, p. 461) about the meaning of something and then takes “them back again,” (Gadamer, 1960/2012, p. 461) just as is done continually during casual conversation. An example from silent study may assist. Supervisor, “Why are you exploring that website?” Student, “It’s to do with Economics. We are studying…” Supervisor, “Fine, but should you be using that iPad?” Student, “I have all my notes on it. Learning Support approved it. I am dyslexic”. The supervisor’s pre-understandings were rejected. His understanding of the issues changed. In Gadamer’s (1960/2012) terms, the ‘text’ (conversation) re-asserted itself and provided a better understanding.

It is necessary for researchers seeking meaning to become aware of pre-understandings, biases and assumptions and constantly re-examine and change their thinking and interpretations as new evidence comes to light (Finlay, 2009). The idea that it is possible to put these things aside or eliminate them altogether from one’s consciousness is rejected by Gadamer (1960/2012, p. 398):
To try to escape from one’s own concepts in interpretation is not only impossible, but manifestly absurd. To interpret means precisely to bring one’s own preconceptions into play so that the text’s meaning can really be made to speak to us.

Van Manen (2011a, p. 1) agrees with Gadamer:

One needs to overcome one’s subjective or private feelings, preferences, inclinations, or expectations that may seduce or tempt one to come to premature, wishful, or one-sided understandings of an experience and that would prevent one from coming to terms with a phenomenon as it is lived through... On the other hand one needs to realize that forgetting all of one’s preunderstandings is not really possible.

In other words, interpretation “always incorporates the assumptions that the researcher brings to the topic” (Creswell, 2013, p. 83). However, pre-understandings or prejudices can be kept at a distance while searching for meaning in the text as discussed earlier. Gadamer (1960/2012) argued that researcher prejudices are not necessarily wrong, or mistaken in some way, but rather they are untested. He distinguishes between ‘productive’ and ‘unproductive’ prejudices (Gadamer, 1960/2012). These cannot be separated in advance, and the only tool to separate them at all is deep reflection, while all the time being prepared to consider all possibilities (Sharkey, 2001). Productive prejudices may be affirmed, and unproductive prejudices may be unmasked and rejected, because they hinder understanding, in a to-and-fro movement from what the text appears to be saying to the researcher’s prejudice (Sharkey, 2001).

Of course, the interpretation of the text can move again as the researcher becomes more experienced in interpreting the object of study, by studying multiple texts. A decision must be made as to when interpretation is developed sufficiently to deliver the interpreted meaning through the medium of language. It must be accepted that the written account of hermeneutic experience can never be a ‘true’ or ‘complete’ or ‘final’ interpretation of the phenomenon. For the research to be worthwhile it is essential that it “seeks to open up a middle space of rich engagement between the research object and the researcher” (Sharkey, 2001, p. 17).
Effect of history or tradition

Crotty (1998, p. 219) suggests that “human beings are essentially historical beings”. The range of constituent historical past experiences, conscious or otherwise, over which an individual has no control, and which will always remain, affects understanding of something in the present. “Understanding is, essentially, a historically effected event” (Gadamer, 1960/2012, p. 299) because it always occurs within some historical background (or tradition) to which an individual is bound inescapably, as that individual is bound also to the object being interpreted (Schwandt, 2007). As an historical being an individual is constantly interpreting their present existence in their ‘world’ influenced by their own background or tradition. “Consciousness of being affected by history…is primarily consciousness of the hermeneutical situation” (Gadamer, 1960/2012, p. 302).

In fact, history does not belong to us, we belong to it. Long before we understand ourselves through the process of self-examination, we understand ourselves in a self-evident way in the family, society, and state in which we live. …That is why the prejudices of the individual, far more than his judgements, constitute the reality of his being. (Gadamer, 1960/2012, p. 278)

Gadamer (1960/2012, p. 291) argues that humans have “an expectation of meaning that follows from the context of what has gone before”. In the research situation, this expectation needs to be adjusted “if the text calls for it” (Gadamer, 1960/2012, p. 291), throughout the process of interpretation of the meaning of the text.

Horizon

To assist the process of interpreting a text Gadamer (1960/2012, p. 301) uses the term ‘horizon’ which he defines as “the range of vision that includes everything that can be seen from a particular vantage point”. In other words it is “a perspective, or way of seeing the world” (Leech & Onwuegbuzie, 2008, p. 401). The personal ‘horizons’ for one’s thinking have a social and historical perspective. Horizons are never ending and when one recedes it is replaced by another (Moustakas, 1994). Gadamer (1960/2012, p. 305) advises researchers to acquire more extensive horizons by
learning “to look beyond what is close at hand”. Understanding is grasping the ‘mind’ of the other person from a description of the lived experience, but understanding is always from “within our own horizon” (Palmer, 1969, p. 122). Understanding involves fusion of past and present horizons (Gadamer, 1960/2012, p. 305). Gadamer (1960/2012) argues that understanding is not just a reproductive activity, but rather a productive one: “We understand in a different way if we understand at all” (Gadamer, 1960/2012, p. 296).

The concept of ‘fusion of horizons’ (Gadamer, 1960/2012; van Manen, 2014) may be explained further using an analogy. Imagine I was standing with some students at the summit of a mountain. The purpose was to gain a better understanding of how the landscape was experienced. One student focused his attention on the other mountains in the range, another on the sea and coastline in the distance, and another on the cloud formations. I saw a symmetry and order in the total landscape. When we discussed our impressions of this experience our horizons fused, and individual understandings of the experience were enhanced. As one participant was a geography student, for example, and since my knowledge of that subject was limited, I learned from him and widened my experience.

Interpretation of a text comes from the interpreter’s (researcher’s) horizons interacting with the text, and the task is to find viable ways of doing so (Palmer, 1969). The interpreter may find he or she has some things in common with the author of the text. “Our experience is no less than an encounter with a world which has a potentially infinite horizon” (Crotty, 1998, p. 86). While I am a participant in this research, my horizons are different from the participants’ horizons. They are broader in some respects, but narrower in others. This research aims for a ‘fusion of horizons’ to produce a better understanding (Gadamer, 1960/2012) of the phenomenon of silent study.

**Gadamer's hermeneutic circle**

The hermeneutic circle is a circular process of interpreting a text. It is circular because any new experience changes how an individual interprets any future event. Our changing horizons are part of the hermeneutic circle. Schleiermacher’s original early nineteenth century hermeneutic circle
was given a different and stronger ontological interpretation for Heidegger and Gadamer in the twentieth century. While Gadamer (1960/2012) agreed with Schleiermacher that the text could be understood as a circular movement between its parts (word, phrase or sentence) and its whole, he argued further that,

the circle of whole and part is not dissolved in perfect understanding but, on the contrary, is most fully realized…The circle describes understanding as the interplay of the movement of tradition and the movement of the interpreter. (Gadamer, 1960/2012, p. 293)

For the interpreter seeking understanding, the hermeneutic circle is “an essential feature of all knowledge and understanding” (Schwandt, 2007, p. 134).

Using Gadamer’s construct of the circle, old and new horizons combine as we try to understand a phenomenon. Encounters with the past, and the tradition from which we come also influence our understanding. The horizon of the present “is continually being formed because we are continually having to test all our prejudices” (Gadamer, 1960/2012, p. 305). The horizon of the present “cannot be formed without the past” (Gadamer, 1960/2012, p. 305). Since neither past and present horizons are distinct or fixed, the real ‘fusion of horizons’ “in the process of understanding…means that as the historical horizon is projected it is simultaneously superseded” (Gadamer, 1960/2012, p. 306).

Gadamer (1960/2012) recognises this viewpoint as a tension between the text and the present. The hermeneutic circle is never closed as interpretations are on-going. Thus, Gadamer (1960/2012) cautions that when we come into the circle we must be careful to not let our pre-conceptions update, or distort it.

Gadamer further argues that ever-changing interpretations of a lived experience can only be achieved through language (Mantzavinos, 2016). Hermeneutics is inescapable and universal. Schwandt (2007, p. 134) observes that, “Every interpretation relies on other interpretations and so on…Interpretation is a ubiquitous and inescapable feature of all human efforts to understand”. We cannot escape the hermeneutic circle because we belong to history and tradition and thus “we are
interpretive beings” (Schwandt, 2007, p. 135). My research relies on Gadamer’s version of the hermeneutic circle.

**Phenomenological meaning**

Phenomenological meaning is not discovered; it is constructed (Guba & Lincoln, 1994; Schwandt, 2007). Meaning in phenomenology is not found just by examining subjective experiences. The phenomenologist goes beyond the examination of subjective experiences to try and find underlying meanings in the phenomenon, the object of the lived experience, by critiquing the meanings shared by the participants in the research (Crotty, 1996). Van Manen (1997b, p. 62) observes that “we gather other people’s experiences because they allow us to become more experienced ourselves”. Van Manen (1997b, p. 20) argues that “objectivity and subjectivity are not mutually exclusive categories”. He further argues that objectivity involves the researcher staying faithful to the object (phenomenon) whereby he or she faithfully guards and defends its true nature by not being misled by extraneous elements. Subjectivity concerns the need to be strongly orientated to the phenomenon and to remain “perceptive, insightful and discerning” (van Manen, 1997b, p. 20), in order to show the phenomenon in all its richness and depth in the written word.

As Moustakas (1994, p. 21) states, in phenomenological research the researcher is “viewing experience and behaviour as an integrated and inseparable relationship of subject and object and of parts and whole”. Michael Crotty (1996, p. 32) was deeply critical of phenomenological researchers in the field of nursing, because of their “overriding subjectivism”. Crotty argues that this cannot be called phenomenology because phenomenology describes “the reality that is beneath and beyond the subject’s experience” (Sharkey, 2001, p. 19). It is necessary to heed this caution in constructing meaning from participants’ interview transcripts.

Meaning in the Gadamer hermeneutic tradition occurs in the interpreter’s mediation with the text “in the context of the tradition in which the interpreter stands” (Schwandt, 2007, p. 186). Clarification of the individual’s meaning by the researcher comes from interpretation through dialogue and conversation (Gadamer, 2001) and “is never fixed or complete” but rather “constructed
each time one seeks to understand” (Schwandt, 2007, p. 186). Gadamer (1960/2012, p. 298) suggests that, “the discovery of the true meaning of a text...is never finished. It is in fact an infinite process”

Constructivist theory proposes that meaning is actively constructed by each individual or within groups from their own experiences, and from reflecting on them. This silent study research fits within the constructivist paradigm outlined by Guba and Lincoln (1994) using their criteria as follows. It utilises a relativist ontology because it collects multiple mental constructions of the phenomenon from participants. The epistemology is transactional and subjectivist, and the ‘findings’ are “created as the investigation proceeds” (Guba & Lincoln, 1994, p. 111). It employs a hermeneutical and dialectical methodology whereby the researcher re-constructs participant interpretations of silent study. Chiari and Nuzzo (2004) identify two forms of constructivism - social constructivism and hermeneutic constructivism. Both emphasize that knowledge is socially and interactively negotiated (Domenici, 2007; Pritchard, 2014; Raskin, 2002; Young & Collin, 2004), but since this research makes meaning from the interpretation of texts, it may be described as hermeneutic constructivism.

Initial prejudices and biases cannot be set aside because they are always there to condition an interpretation (Gadamer, 1960/2012). A viewpoint will never be devoid of them. If a researcher makes himself aware of them and examines them, they can be engaged, so that while they govern an initial interpretation, any researcher prejudice or bias that may affect understanding of participants and what they are saying may be altered or self-cancelled, to use Gadamer’s (1960/2012) term discussed above. Understanding of a phenomenon is mutually constructed and negotiated with participants using a series of logical questions and answers. Individuals construct their own meaning from their own perspective and so there are multiple realities of the same phenomenon. Constructions continually change with social encounters and interactions with people in the world (Schwandt, 2007). Participants’ changing constructions can vary in sophistication and in the extent to which they are informed (Schwandt, 1994). A good understanding of what participants mean is a perquisite for interpretation.


**Emphasis of the research**

This research sought to gain new, deeper understandings of silent study. The task was ontological - to find the very nature or reality of being a student in silent study. Participants’ lived experiences of silent study were influenced by factors both inside the school (like school culture), and some beyond the school (like homework done at home). In-school and relevant outside-school influences were included in the interview question, and these were embraced into the interpretive process later in the research.

**Summary**

This chapter explains why the research is qualitative, phenomenological, and hermeneutic. Philosophical underpinnings include the work of the earlier philosophers who influenced Heidegger and Gadamer, whose philosophical writings impact on this research. Gadamer’s philosophical hermeneutics forms the basis for interpretation of the textual material. Philosophical hermeneutics allows the researcher to engage biases and accepts historical effects of the researcher’s past. As the mediation with the texts to find meaning proceeds using Gadamer’s (1960/2012) hermeneutic circle, horizons change, and thinking is re-examined as the meaning of the lived experience becomes clearer. The philosophical underpinnings presented in this chapter influence the research design, the methodology and the method which are outlined in the next chapter.
Chapter 4 – Research design, methodology, and method

This chapter outlines the research design, the methodology for this study and the method. The philosophical underpinnings presented in Chapter 3 are important influences. The research design is the general action plan of how the research will proceed (Creswell, 2013). My research was informed by van Manen’s (1997b) framework introduced in the next section. Van Manen’s (1997b) concept of methodology was consistent with that of Crotty (1998) and Schwandt (2007) who described methodology as the philosophical theory behind a research study, including the fundamental assumptions and principles which govern which methods are used. Methodology is literally the study of the method. The methodology is the “middle ground” (Schwandt, 2007, p. 193) between the theoretical perspective (Chapter 3) and the method. Method includes the specific set of procedures, techniques or tools used in the research to gather information and analyse the data to explicate the lived experience (Crotty, 1998; Schwandt, 2007).

Research design

Van Manen’s (1997b) framework informed the research design. His guide to hermeneutic phenomenological research may be seen as a “dynamic interplay among six research activities” (van Manen, 1997b, p. 30):

1. turning to a phenomenon which seriously interests us and commits us to the world;

2. investigating experience as we live it rather than as we conceptualize it;

3. reflecting on the essential themes which characterize the phenomenon;

4. describing the phenomenon through the art of writing and rewriting;

5. maintaining a strong and oriented pedagogical relation to the phenomenon;

6. balancing the research context by considering parts and whole. (van Manen, 1997b, pp. 30-31)
The first activity provided a prompt to guide the research questions, the second determined this study as a human science enquiry into lived experience and the last four informed the analysis of data.

**Methodology**

The methodology utilises van Manen’s (1997b) methodological framework to structure the research. Van Manen (1997b) advises that the research process involves working on the six aspects, sometimes individually, and sometimes simultaneously, as I have done in this study. The framework is given flesh for this research, with the aim to gain insights into the phenomenon of silent study.

**Turning to a phenomenon which commits us**

This research was designed to find out what was going on for students in silent study, how they experienced it, and if they found it was of benefit to them. I had supervised all Year 13 silent study classes, each year, for ten years. CIE Year 13 students study four subjects and their fifth ‘subject’ is silent study. In each of seven years prior to this research, an evaluation of silent study was carried out. This included questionnaires (open-ended, closed format, multiple-choice and Likert), essays about silent study, and recorded interviews. One year, all students were asked to frame their own questionnaire and complete it. After reflecting on all the results, information was used from these data to frame the research questions employed for this study. The central research question that emerged from this process was: “*How do high-achieving Year 13 boys from a high decile school experience silent study?*” The related sub-questions emanating from the central question were: “*How have these boys utilized silent study?*” and “*What makes the silent study experience successful or otherwise for these boys?*”

**Investigating experience as it is lived**

All participants were directly experiencing silent study, but data were obtained not during silent study periods, but after. This presented a challenge. The challenge of an account of any lived
experience after the event is recognised for any human science research (van Manen, 2014; Westfall-Greiter & Schwarz, 2012). As Gadamer (1986, p. 68) argues, “when we interpret the meaning of something, we actually interpret an interpretation. Phenomenological studies of the same phenomenon can differ widely in their interpretation because every researcher must “strive for new and surprising insights” (van Manen, 2014, p. 351). Such insights were facilitated in the analysis phase of this research by constantly returning to and reflecting on participants’ descriptions. This reflection is “neither inductive nor deductive – rather it is reductive” (van Manen, 2014, p. 222) and abstemious - a stepping back or “clearing the mind of garbage” (van Manen, 2014, p. 223) while constantly questioning pre-understandings. Therefore, in this process of repeated deep reflection, as the analysis proceeded, my interpretations were subject to change, to expansion, to compression, to removal, or to replacement. Participants’ and researcher’s horizons thus became fused. I intuitively and interpretively looked beyond the participants’ descriptions, by reflection and further enquiry with participants, to make sense of the lived experience under investigation. It was fortunate that in this research I could go back to the participants, when necessary, and clarify, confirm, change, or reject my interpretations by engaging in conversations with them about the phenomenon of silent study. I accepted that both participants’ descriptions and mine had already involved interpretation as does “every form of human awareness” (van Manen & Adams, 2009, p. 451).

The bulk of the data came from participant group and individual interviews. Detailed, in-depth, first person descriptions are usually the starting point for phenomenological enquiry (Finlay, 2012) in order to gain insights into the lifeworld of participants (Finlay, 2013b). Interviews in a phenomenological study focus on lived experiences and are the main and necessary source of data (Marshall & Rossman, 2011). The group interview has a low cost, the setting is more familiar to participants, it produces quick results, and it increases the sample size, but the interviewer may have less control over the progress of the interview (Marshall & Rossman, 2011). In group interviews participants may interact with each other either because they share the experience or alternatively because they may disagree with each other, both of which are advantageous to the data gathering (J. Bell, 2010). Group and individual interview data were treated as having the same value in this study.
This was because after careful consideration of the group data, I had no evidence that any of the data had been socially constructed.

**Reflecting on the textual data to extract meanings**

Reflecting on each significant statement was guided by Gadamer’s (1960/2012, p. 461) explicit advice that:

> A person who is trying to understand a text has to keep everything at a distance – namely everything that suggests itself, on the basis of his own prejudices, as the meaning expected – as soon as it is rejected by the sense of the text itself.

The reason for this openness in “interrogating the text” (Marzola, 1988, p. 243) to determine meanings expressed by participants was “so that the text can present itself in all its otherness and thus assert its own truth against one’s own fore-meanings” (Gadamer, 1960/2012, pp. 272-273). The aim of this step was to get as much information as possible about how individuals experienced (Leech & Onwuegbuzie, 2008) silent study. As meaning is developed, so is understanding, and through sustained interpretive reflection significant statements with something meaningful in common can be clustered together.

**Reflection on essential themes**

Themes can be unearthed by reflection on the clusters of meaning derived from the texts under study (van Manen, 1997b). The determination of themes is “a complex and creative process of insightful invention discovery or disclosure” (van Manen, 2014, p. 320). Van Manen (1997b) understands themes as the experiential structures of the lived experience. They provide the key threads around which a phenomenological description of the data is arranged, as a means to give control and order to the writing (van Manen, 1997b). These themes are peculiar to the phenomenon under investigation, and should not be confused with van Manen’s (2014) five lifeworld or existential ‘themes’ pertaining to any human phenomenon. Following van Manen I adopt the construct of
existentials to the latter to avoid confusion. I developed three silent study themes and analysed each theme through the five existentials to assist my interpretation as explained in the next section.

Silent study themes that emerge from reflection on the data can be collated according to Creswell’s (2013) criteria of qualities of focus, simplification of ideas, and structural description of the lived experience. The themes can be re-examined to see if they isolate and faithfully convey the structures of the lived experience of a phenomenon. Van Manen (1997b) suggests three ways of doing this in his holistic, selective, and detailed reading approaches. The holistic approach looks at the whole text to formulate single phrases (themes) that express meaning. The selective approach looks for thematic phrases in the text that capture fundamental meaning. The detailed reading approach examines every sentence and asks how it reveals meaning for possible themes. All approaches were used to about the same extent. The task was to find themes around which to weave the phenomenological description and capture their thrust in singular statements.

Van Manen (1997b, p. 78) cautions against determining themes in hermeneutic phenomenological analysis by “an unambiguous and fairly mechanical application of some frequency count or coding” of interpreted meaning statements. He says this is because themes are just abstractions for capturing lived experiences that a researcher is trying to understand. While this viewpoint is accepted, in this research including the total number of participants providing a similar significant statement on, for example, the benefit of silence for study, was thought worthy of attention, and was included, but did not dominate.

**Descriptions of the phenomenon**

This fourth and most important activity from van Manen’s (1997b) six-part framework is the writing of the interpretations from the analysis. Following the identification of themes relating to the phenomenon, van Manen (1997b) suggests five possible ways of organising the enquiry including inventing one’s own method. This research utilises one of these, as follows. Van Manen (1997b, 2014) observes that any lived experience may be studied in terms of fundamental lifeworld ‘themes’ (or what I have called existentials). The five existentials are corporeality (lived body); temporality
(lived time); spatiality (lived space); sociality (lived relationships); and materiality (lived things and technology) (van Manen, 2014). The last existential is a recent addition, developed in response to the increase in technologies that impact more now than previously on the lived experience of people particularly with regard to conditions of “privacy, secrecy, solitude, and intimacy” (van Manen, 2010, p. 1023). These five lifeworld existentials work “in complex intermixture” (Frieson, 2012, p. 43) and “can be differentiated [for research purposes] but not separated” (van Manen, 1997b, p. 105) because “one existential always calls forth the other aspects” (van Manen, 1997b, p. 105). Van Manen (1997b, p. 102) suggests that these five dimensions, or fundamental ‘existential themes’ of any lived experience “probably pervade the lifeworlds of all human beings, regardless of their historical, cultural or social situatedness”. These existentials are not to be confused with “the more particular themes of certain human phenomena like parenting or teaching” (van Manen, 1997b, p. 102). I used these existentials as interpretive “guides to reflection” (van Manen, 1997b, p. 101) to examine each of the silent study themes by weaving the writing of an in-depth phenomenological description of the lifeworld of silent study around them in a process van Manen (1997b, p. 167) calls “working the text”. Each existential was like a component in a ‘compound lens’ made up of all five existentials used to focus an understanding of silent study so that silent study was “described from many sides, angles and views” (Moustakas, 1994, p. 78). The intricate unity of van Manen’s (1997b) existentials is what constitutes the lifeworld of any lived experience, including silent study.

*Lived space* is “felt space” (van Manen, 1997b, p. 102). This dimension is not related to the objective area of a large room in square metres, for example, but rather to how individuals feel about the space. Do they feel it to be comfortable or uncomfortable, warm, or cold, see the room as inviting, or not? Are such feelings constant or are they changing (van Manen, 2014). Is a particular space (like a coffee shop) better than some other spaces for certain things like reading (van Manen, 1997b)? *Lived space* could include cyberspace, and an individual’s “inner world” – such as their secret unspoken thoughts – as well as their “outer world” (van Manen, 2014, p. 305). Capturing those inner thoughts are important in human science research.
Lived body refers to one’s experience of one’s own body including the physical or bodily presence of ourselves, and of others in the room, our personal comfort or discomfort, our awareness of others and what they do, posture, our manner of sitting in a chair, our use of a desk and the position of our hands, arms and feet (van Manen, 2014, p. 304). Do we feel anxious, cheerful, or fearful under certain circumstances (van Manen, 2014, p. 304)? Would we prefer to study in another way; in the Library, under a tree, lying down or on a bean bag? Perhaps as van Manen (2014, p. 304) asks “while we are bodily engaged in the world, do we really pay any attention to the body?” How do we regard our body, and do we compare it to that of others? Silent study has much to do with the room and the bodily comforts it provides, as well as the choices made that would make study productive or otherwise. Lived body includes an individual’s hopes, dreams, ambitions, personal aspirations, family expectations, cultural beliefs and behaviours, student activity influences (including reported cognitive and motivational determinants of learning), and aspects of school culture. General school rules, policies, and procedures about expectations and behaviour at school impact on students lived body experiences. Lived body also includes students’ conception of their ability, their motivation, engagement, planning, time management, study habits, preferred study styles, and personality (van Manen, 2014). Lived body includes study in subjects that have a physical or practical component, co-curricular activities, and experiences like a family crisis. Van Manen (2014, p. 304) notes that for some phenomenological authors, lived body “is the fundamental motif of their understanding of human phenomena” because lived experience is primarily experienced by the body. For others, for example Heidegger (1927/2008), it is lived time, because “without time there would not be being” (van Manen, 2014, p. 306).

Lived time is lived or subjective time, not objective, or chronological time. Does a period of study seem long or short? “The temporal dimensions of past, present and future constitute the horizons of a person’s temporal landscape” (van Manen, 1997b, p. 104). As examination time approaches, students’ approaches to study vary. The experience of lived time is moderated by students’ aspirations and ambitions for the future (van Manen, 2014; Walkey et al., 2013). Lived time includes maturation effects over (chronological) time (van Manen, 1997b). Boys’ aspirations and ambitions
are lower than girls in the early years of high school, but accelerate faster to peak above those of
girls by the end of high school (Shapka et al., 2012). Meaningful or productive study is dependent
not on the amount of time spent, but rather on learned study habits that ensure study time is not
wasted, and this requires motivation (Brown, 2014). Motivation may change over time (Sharan &
Tan, 2008). Time at school can be lost by excused and un-excused absences through illness or
sporting, musical, or cultural activities, preferences, and disengagement and this crucially affects
academic performance (Arulampalam, Naylor, & Smith, 2012; Aucejo & Romano, 2016).

*Lived human relation* is to do with relationships with others in shared interpersonal spaces. How do
we consider others as we go about our study? Does silence or anything else affect our relationships
with other students and with the supervisor? Relationships may be affected if a student’s mobile
phone signal intrudes on the silence. How does a student react to or with other students or the
supervisor when the study period is over, and the silence is ended? Is there any physical contact
with a fellow student like a handshake or an arm around the shoulder? How does a school
community affect what we do in silent study? What of the relationships outside the school,
particularly family and the opposite sex? The whole context of the *Internet*, cell phones and social
media loom large in the lives, but particularly in the relationships of Year 13 students and they must
learn how to manage them.

*Lived things and technology* (materiality) affect individual lived experiences. Material ‘things’ like
cell phones and computers or even television, were unknown for some earlier generations, but have
now become part of our world. ‘Things’ are used in different ways and by the young more so than
by the older generation (Marston, Kroll, Fink, De Rosario, & Gschwind, 2016). Van Manen (2014,
p. 307) asks, “How are things extensions of our bodies and minds?” Computers and similar
technology have made information much more readily available. In the Study Centre ‘things’ can
also include text books, air conditioning, desks, chairs, the water cooler and other physical resources.
These ‘things’ can all add to the material comforts of silent study and are part of the lived experience.
Pedagogical relation to silent study

Silent study was maintained throughout the period of writing this research report, and I was able to focus concurrently on the evidence and data collation, and on the phenomenon, itself, to continue to gain a better understanding of silent study. Gadamer’s (1960/2012) reconceived hermeneutic circle provided a research paradigm that ensured I continued to consider the whole of the writing in relation to its parts and vice versa, but also to be aware of and be true to the tenet that the circle was an essential feature of all understanding of lived experience including the understandings explored in this particular study.

Balancing the research context

Van Manen (1997b, p. 77) begins his discussion of interpreting phenomenological data (including derived themes) with what he calls “phenomenological reflection” on descriptions of individual experiences. These descriptions and that which emerges in the researcher’s mind from these reflections are the ‘parts’ of the experience and of Gadamer’s (1960/2012) hermeneutic circle. This reflection process enables the researcher to “grasp the essential meaning or the ‘whole’ of the phenomenon” (Creswell, 2013, p. 195) as it emerges and changes according to the interplay of parts and whole in that hermeneutic circle. A description of the essential meaning of a phenomenon is “a grasp of the very nature of the thing” (van Manen, 1997b, p. 177). It is not an explanation of the phenomenon, but rather a blend or a composite of the meanings articulated by the participants and the researcher (Creswell, 2013). The ‘essential meaning’ of a phenomenon is sometimes called the ‘essence’. For example, from descriptions of some subjects about the experience of living with AIDS, Anderson and Spencer (2002) interpreted the essence of the lived experience of the disease as “initially frightening, with a dread of body wasting and personal loss” (p. 1349). The term ‘essential meaning’ is discussed in depth in Chapter 8 where it is related to those aspects of the experience of silent study that are essential to the experience and without which it would not be silent study. The essential meaning is produced by going back over all the data and is most likely to accommodate parts of all the themes, but not necessarily so. The purpose of this final step of this
research is “to see the deeper significance of the lived experience it describes” (van Manen, 1997b, p. 122); that is the “explicit structure of the meaning” (Creswell, 2013, p. 195).

Method

While hermeneutic phenomenology provides a robust framework for research, it contains no rule-like analytic procedures. Thus it depends on “scholarship, tact, judgement and taste” (Sharkey, 2001, p. 16). It does not solve a problem but rather questions the meaning of some aspect of a lifeworld (Gadamer, 1960/2012). Phenomenology cannot be reduced “to a set of standard strategies and techniques” (van Manen, 2014, p. 41), although each piece of phenomenological research may have similar methods. A suitable method must be chosen or invented depending on the nature of the lived experience under investigation (van Manen, 2014) as is done in this chapter.

The sample

Thirty-five participants were drawn from a total population of 303 CIE Year 13 students from the boys’ only school during 2014. The 303 students represented 20 nationalities. I read out a brief statement (Appendix 2) to all five silent study classes, asking for volunteers for the research. This statement was contained in the ethics application. A copy of the research information sheet and consent form modified as required after the ethics application (Appendices 4 and 5) was then given to all students who asked for it. These documents had the prior approval of the Headmaster and the Board of Trustees, (Appendix 1) who had received copies before the ethics application had been submitted and subsequently approved by the University of Otago Human Ethics Committee (Appendix 3). The approval from the Ethics Committee included the reading of the brief statement referred to above (Appendix 3) and the school approval included all amendments required by the Ethics Committee.

Signed consent forms were returned by 75 students. One week after the required date, 11 late consent forms returned were kept in reserve, but were not subsequently required in the selection of
the sample. Data for the research was provided by 35 participants, 23 in group interviews and 12 in individual interviews.

The groups were made up two groups each of eight students and one group of seven. Initially eight students were randomly selected from consenting students in each of the three largest study classes. Each consent form was numbered, and students selected by using a random number generator. One group interview had to proceed in the absence of one selected student who was absent on the day of interview. The largest classes were involved because that meant that each group interview could be carried out during a timetabled study period while a relief supervisor managed the other students. It avoided the situation where participants would miss a timetabled subject class. Participants were aware they would miss two silent study periods for the interviews.

From those not selected for group interviews, 12 different students were randomly selected for individual interviews. Eight participants for each of the group interviews meant an accurate recording was possible, with students and the researcher arranged in a circular fashion around the digital voice recorder. A larger group would have made it difficult to record accurately several different accents, for transcription. Marshall and Rossman (2011) suggest typical numbers for a group interview are seven to ten. Cresswell (2013) advises for phenomenological research up to ten individual interviewees are sufficient. Variety and more than enough data were provided by 12 individual interviewees. It would have been possible to interview more students, but that did not prove necessary because of the quantity and richness of the data already obtained.

The sampling resulted in participants from nine different nationality groups with at least three from each of the two largest nationality groups (New Zealand European/Pākehā; Chinese) and at least one from the next largest groups (Indian; Sri Lankan; Korean; Māori). It also gave at least three participants from each of the schools’ ten form classes. All nine nationality groups and all form classes were represented in the twelve individual interviews and in the three group interviews. This indicates the selection process had produced a balanced random selection. The selection cohort reflected a similar demographic pattern to the 2014 cohort of Year 13 CIE students. In the year of
data gathering, when study classes had finished, five prefects from the consenting students, but not previously selected, asked to be involved. They provided a further brief recording, and the virtually unchanged transcription is presented in the Epilogue.

**Ethical safeguards**

The University of Otago Human Ethics Committee approved the study. Participation was voluntary. Participants were advised they would miss only one or two study periods. The potential participants were aged 16-18 years of age and were encouraged to discuss involvement with their parents. They were provided with an information sheet and a consent form which they signed and returned if they wished to be involved. Those selected were free to withdraw at any time and to decline to answer any questions they found uncomfortable. Pseudonyms were used to preserve anonymity and only non-identifying material from interviews and school records was used. All participants viewed transcripts and any changes requested were made. They were free to discuss any aspect of the research throughout the progress of data gathering and analysis. The research school Headmaster and the Board of Trustees approved the study and the disclosure of the Headmaster and the name of the school. No material from non-participants was cited in the research.

**Gathering data**

Four datasets were obtained.

1. **Researcher reflective diary**: This was completed for each school day from the beginning of the research including the year in which data were collected. This document helped me identify my own pre-understandings, prejudices, biases, preferences, or expectations, and make them explicit so that I could re-examine them and be open to changing my thinking, as more evidence emerged from the participants. This document provided a limited amount of data for the reporting, generally by explaining, confirming, validating, or elaborating on statements made by participants, because the focus was on the students lived experience, not mine.
2. **Demographic data:** School records provided data on interviewees. This included information about academic achievement, streamed form class placement, ethnicity, subject choices, extra-curricular involvement and future course and career plans. Streamed form classes ranged from 7A (very high ability) to 7I (average ability). The school measured ‘ability’ and streamed accordingly by the marks achieved in school internal and Cambridge external examinations. School reports provided some data on learning outcomes, learning success, motivation and engagement and extra-curricular involvement. All these data were used to enrich student-reported data.

3. **Group interviews:** These were designed to gain an overview of students’ experiences of silent study and to get a range of ideas and different points of view, including conflicting views. Group interviews were used to gain as comprehensive and inclusive a collation of diverse responses as possible, without my being absent from silent study too much, to interview participants. All interviews were recorded and transcribed verbatim. The open-ended interview questions (below) used unchanged for both group and individual interviews were designed to obtain authentic stories, anecdotes, recollections and details of incidents, specific instances, particular situations, and examples of personal experiences in silent study. Comprehensive descriptions were wanted – from the inside – feelings, moods, emotions. Participants were asked to try to avoid over-reliance on abstract interpretations, generalisations, speculations, personal opinions or judgments as van Manen (1997b) advises. For instance, ‘Study periods should not be silent’ was an opinion, whereas ‘Keeping quiet is something I find difficult’ was part of the lived experience.

4. **In-depth individual interviews:** All individual interviews were recorded and transcribed verbatim. Individual texts (from the interview transcripts) were all examined. Supplementary questions were used as prompts to help elucidate my understanding of the lived experience. It was considered important that the researcher and the researched shared power in this process because the lifeworld of silent study was a shared reality. Participants were asked to suggest any relevant question not covered and to respond to it. Group
interviews and individual interviews were the main sources of data for this research. Idiosyncratic ideas were carefully scrutinised and explored further if necessary through additional brief interviews or conversations with participants. An effort was made to include any significant statements derived from idiosyncratic data. Seven students were also asked individual supplementary questions away from the group when I needed to seek clarification for an aspect of data which I had not understood since all aspects of the descriptions of the experience were important in this research. This was a form of “collaborative analysis” or “hermeneutic conversation” (van Manen, 1997, p. 100), and, in addition, helped me to understand better what others had said. Of importance for obtaining further data were the two occasions where I sensed a participant in a group might prefer to voice his thoughts in private which did prove to be the case in both instances. Participants presented additional ideas in response to the last question: “Is there anything else about silent study you would like to raise?”

The interview questions are contained in Table 3 below.

**Table 3 Interview questions**

1. Describe your first experience of study periods?
2. Describe what you do in a typical study period?
3. What features of study periods stand out for you and why?
4. What feelings are generated by study periods?
5. How do you plan for and use study periods?
6. How do study periods compare with homework done out of school?
7. How does silence for study affect you?
8. How does this compare with the way you study at home?
9. What are your facilities like, at home, for study?
10. How do your study periods compare with your Year 12 and other schools you attended?
11. How has silent study helped you meet your goals for the future?
12. How could study periods be made more valuable for you?

13. Is there anything else about silent study you would like to raise?

**Significant statements**

Significant phrases or sentences were identified and extracted from the transcriptions. Significant statements are those that capture some unique understanding of the meaning of silent study for each individual participant. Their significance was the only basis for inclusion. To decide which of the statements were significant, van Manen (1997b, p. 86) suggests asking a very simple question concerning each data statement, “What is this example an example of?” or “What is going on here?” The key question to be asked of every statement in the transcriptions was, “What does he mean by that statement?”

The significant statements were numbered to assist identification in the later stages of analysis. Then patterns were identified, and the initial phrases or sentences reduced to non-overlapping significant statements relevant to the research questions. These included statements common to some or all participants, as well as those peculiar to an individual.

Van Manen (2014, p. 320) believes texts are “sources of meaning”. In reflecting on the data I wanted to allow any hidden meanings to emerge, as an integration of what appeared in my changing interpretations and what was stated by participants (Moustakas, 1994). What was the nature of the reality of the lived experience of silent study for Year 13 boys? What qualities did it have? How was the phenomenon experienced? Did the experience vary at different times and per the conditions? Attention was focused on the “conditions that precipitate the textural qualities, the feelings, sense experiences and thoughts” (Moustakas, 1994, p. 78); “the setting and context” (Creswell, 2013, p. 194). I made every effort to remain aware of my own interpretive influences and address them throughout this process of finding significant statements and interpreting their meaning.
**Understood meanings**

For each of the significant statements “a creative hermeneutic process” (van Manen, 1997b, p. 96) of reflection was used to produce my understanding of what the statement meant. My understanding was noted alongside that phrase or sentence. Table 3 below shows examples of significant statements and my understanding of the meaning of each statement.

**Table 4 Selected examples of significant statements from silent study students, with my understanding of the meaning**

<table>
<thead>
<tr>
<th>Significant statement examples</th>
<th>What the statement meant</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think silence affects me positively. I think it enables me to work without distractions.</td>
<td>Silence provides positive conditions for undistracted study.</td>
</tr>
<tr>
<td>I feel like I get a lot more done when there is silence, than when there is noise because you get easily distracted.</td>
<td>Distraction from noise compromises industry.</td>
</tr>
<tr>
<td>I wish I could ask people a question when I am confused, but if everyone else could ask questions of their friends then I would find that I would get distracted through that as well.</td>
<td>Peer collaboration is positive, but distracting.</td>
</tr>
<tr>
<td>I think the provision of computers, the IT facilities, are quite good because they’re restricted on the school’s systems. That allows you to be more focused and less distracted when using those. I think that is quite beneficial.</td>
<td>IT facilities are valued. IT restrictions help focus, and management of distractions.</td>
</tr>
</tbody>
</table>
In the process of examining the texts for meaning I was guided by Gadamer’s philosophical hermeneutics (Gadamer, 1960/2012, 2006) which allows the researcher to engage biases or pre-understandings in formulating interpretations, and accepts the effects of background, history and tradition (including, in my case, my teaching background, in mainly what are regarded as traditional schools). These influences were initially kept at a distance by making a determined and conscious effort to do so, as far as was humanly possible, while examining the texts. But, the resulting interpretations were still mine, and different from another researcher’s interpretations from the same data. This was discussed fully in Chapter 3. While any non-participant silent study data were not used directly in this research for reasons of ethics, they formed part of my history (Gadamer, 1960/2012) although I tried to put them aside while reflecting on the data. My understanding of what each significant statement meant is now referred to as a meaning statement.

Clusters of meaning statements

After examining all the meaning statements, those pertaining to similar aspects of silent study were grouped or clustered together. For example, the meaning statements relating to silence for school study were clustered together, because they conveyed the meaning that silence is integral to silent study. Any idiosyncratic meanings were also placed in a cluster that seemed appropriate. When one participant suggested the widely-separated placement of the desks was the reason for silence, the meaning of that idea could be in either a ‘silence’ cluster, or alternatively, in a cluster, relating to the effect of physical features in the room, or both. It was accepted any placement could change as the analysis proceeded. Some of the meanings grouped together initially in the ‘silence’ cluster, for example, were: silence was generally preferred, but for varying reasons; adaptation to silent study was required, as it was a new and different experience; change in the level of noise was disturbing; effect of others working in silence was motivational.

Determining themes from the clusters

Themes are “the structures of meaning” (van Manen, 1997b, p. 101), or “tool(s) to get to the meaning of an experience” (van Manen, 1997b, p. 88). From the clusters of meaning, in a process van Manen
describes as “isolating thematic statements”, themes relating to the phenomenon of silent study were developed for writing the phenomenological description. As van Manen (1997b, p. 79) advises this is “a process of insightful invention, discovery or disclosure…grasping and formulating a thematic understanding is not a rule-bound process, but a free act of “seeing meaning”. From characteristics of silent study that were uppermost in participants’ experience of the phenomenon, those that had a focus, a simplification, a commonality, or a composite meaning were sought. The discovery process highlighted three thematic characteristics or themes. These themes generally related to how these boys utilized silent study and they illuminated the silent study experience in a way that addressed the research questions. For participants, the silent study experience involved a time that focused on individual and silent study, specifically targeted to improve CIE grades. It involved minimal distraction and a focus on relevant study; stimulation of goal setting and other self-regulated learning skills; and complex relationships.

The three themes below structured the analysis.

1. Silence, distraction, and focus
2. Planning and learning activities
3. Student/student and student/supervisor relationships

**Interpretation, findings, and discussion**

The themes were examined through the lens of each of Van Manen’s (1997b, 2014) five existentials as discussed above. Silent study is an identifiable aspect of the lifeworld of Year 13 boys. My understanding of the reality of silent study was constantly changing as the writing proceeded. What is presented as the data analysis later in this report is a snapshot captured through the ‘lived experience lens’ to produce a phenomenological description of silent study. The emerging findings are discussed in relation to the relevant literature. The aim is to organise and reduce the data to then enable me to suggest the essential meaning of the phenomenon of silent study as defined and discussed in Chapter 8. This is the final stage of the research.
In the interpretive analysis, where an aspect of the lived experience is particularly multifaceted in terms of two or more of the five lifeworld existentials, the discussion is placed with the most relevant existential. For example, social media are not available in silent study. This could be discussed under ‘lived human relationships to others’ (social) or under ‘lived time’ (effectiveness of time spent) or under ‘lived things and technology’ because technology is the means of access to social media.

**Summary of the method**

Meanings derived from significant statements from participants’ interviews are sorted into clusters. Each of the three themes which emerged from the clusters are developed, and descriptive interpretations formed and discussed, through the lens of each of the five lifeworld existentials. From the interpretations, the essential meaning is determined.

The methodical framework with the steps in the data collection and analysis is shown below in diagrammatic form (Figure 1).
Figure 1 Data collection and analysis framework

LIVED EXPERIENCE OF SILENT STUDY
METHODICAL FRAMEWORK FOR DATA COLLECTION AND ANALYSIS

Trustworthiness of the research

The hermeneutic analytical interpretive processes used for this study rely on van Manen (1997b, 2014), in particular, and on the use of Gadamer’s (1960/2012) hermeneutic circle, ongoing dialogue and fusion of horizons in ways that are transparent to the reader. Creswell (2013) challenged the appropriateness of conditional measures of ‘validity’ and ‘reliability’ in phenomenological research. Marshall and Rossman (2011) suggest that the criteria for the soundness of qualitative research, as they exist at present, may not be suitable for phenomenological research of lived experience themes. My research adopted Guba and Lincoln’s (1994) measures of credibility, transferability, dependability and confirmability. Van Manen (2014) suggests that measures of criterion-related validity are incompatible with phenomenological methodology. He reasons that this is because...
phenomenological research should not describe the “factual empirical”, but rather the “existential empirical meaning structures” (van Manen, 2014, p. 348) of a phenomenon. Van Manen (2014, p. 348) goes further than Guba and Lincoln and suggests that the validity of a phenomenological study should be judged solely by “the originality of insight and the soundness of interpretative processes”.

The credibility or believability of the results of this research is best judged by the participants. Participant individuals and groups who all read and discussed their transcripts at length stated that their experience of silent study had been clearly represented, and there was little they could add.

The participants were asked constantly to confirm if my emerging understanding was also their understanding, by brief conversations with them after reflecting on what they had said in the interviews. A simple question to a participant like, “Did I understand this correctly”, or “Is this what you meant,” provided confirmability. In ten years of silent study I had sought feedback, for example, “How was study today?” Sometimes unsolicited feedback was given, for example, “Those study periods really helped me for my exams.” Here the student’s tone of voice and smile could convey a wealth of meaning. My interpretations of those things from participants in the year of data gathering were recorded in my diary and compared, for example, with examination results when they became available. For the interviews, I wrote my own brief notes as the interviews proceeded and included a note on any verbal or non-verbal significant act like a smile or a grimace. As teachers are currently required to do, (Education Council, 2016) over more than ten years, I had constantly asked students questions like, “How did you finally get the answer to the question you asked me at the start of the period?” or, “What about the silence in your study periods?” Such information assisted my understanding and is part of my history (Gadamer, 1960/2012), but texts from such exchanges were not cited directly in this research for reasons of ethics. Dependable analysis relied on my integrity to interpret interview transcripts ethically (Bournot-Trites & Joe, 2005; Mohr, 2001; Poggenpoel & Myburgh, 2004; Zeni, 2001).

Two other questions also influencing the research need to be addressed. Firstly, were the participants describing the phenomenon of silent study as it really was for them, or were they telling me what they thought I wanted to hear? They knew me well, they indicated they liked me, and this may have
influenced what they told me. To address this several measures were taken, to encourage candid responses. The participants were cautioned before the interviews to not be influenced by the teacher/student relationship. They were advised I wanted to know about their experiences, particularly things I did not know. This was also stressed on the information sheet. I was an experienced interviewer who knew how to phrase supplementary questions. The participants were very forceful and seemed sincere and focused in their responses. Two participants were unable to express some ideas in words, perhaps because they did not have the linguistic competence. Their silence indicated the question needed to be re-phrased, so they could convey what they wanted to express. I took great care in listening, to make sure I understood what participants were saying. I sometimes reworded some questions, and if unsure what they meant, reworded their answers, and asked them if that was what they meant. Nine participants gave the same two replies when asked about the possibility of individuals telling me only what they thought I wanted to hear. They said that students would generally give me ‘straight’ answers, that is, tell me candidly, exactly what they thought. They also said that all participants were more likely to be honest with me than with a stranger. My daily contact with them accommodated multiple opportunities to develop a better understanding of aspects of their lived experience.

Secondly, how did I avoid selectively presenting examples in my writing, only where the participants agreed with my understanding? Several strategies were used to address this. Using the hermeneutic circle (Gadamer, 1960/2012) my prior knowledge was challenged and modified throughout the analysis phase, as a deeper interpretation or understanding of the text was gained (Gadamer, 1960/2012). A systematic process was used to select the significant statements. The second and third reading of the transcripts revealed five further significant statements and one more on a later reading. Many statements were substantially similar. Therefore, any that were not, stood out. The words of the participants were used where possible, and all unique examples were included, to stay close to the participant’s original meaning.
Summary

The chosen design, methodology and method were appropriate for the study of a lived experience (Creswell, 2013; van Manen, 1997b). In reflecting on interview data to extract meanings I was well-placed to understand participants’ descriptions since I had been immersed in the life-world of silent study for longer than any Year 13 student. A field of individual participant meanings of silent study was influenced by differences in world view (Laverty, 2003). My task was to distil those meanings to understand silent study as it is for students and present it for the reader of this report for their understanding. All participant statements assisted my understanding including some distinctive, unusual, and unique aspects.

Gadamer (1960/2012) observes that a phenomenological researcher does not aim to produce a theory, but rather an understanding, which is really self-understanding. The rest of this research report presents my interpretations of what silent study might mean. Interview responses in the report that seem similar may contain hidden nuances or shades of meaning. Participant A might say, “seeing others working hard motivates me”. The example of others makes him want to conform, do what the others are doing, and not be left behind. Participant B might say, “seeing others working hard makes me work harder”. This is different. He wants to compete, to excel, and to do better than the others. In these two examples, while the stimulus from others is the same, the effect is different.

To extract and justify these subtleties in what follows, some repetition or a somewhat lengthy participant citation is sometimes required in the text. Anyone who subsequently reads this report then interprets it in their own way and to that extent re-writes it for themselves in their reflective engagement with the text (van Manen, 2014). Gadamer believes understanding is an on-going process, as we are historical beings, and new understandings are made by integrating what is unfamiliar with what is familiar. The next three chapters present my understanding and interpretation of the meaning of the lived experience of silent study, guided by van Manen’s (1997b) advice concerning the emphasis and the detail:
Hermeneutic phenomenology encourages a certain attentive awareness to the details and seemingly trivial dimensions of our everyday educational lives. It makes us thoughtfully aware of the consequential in the inconsequential, the significant in the taken-for-granted. (van Manen, 1997b, p. 8)

The stuff of this study is the detail, including the apparently trivial, the inconsequential, and the taken-for-granted, to be woven into the fabric of the phenomenological description of the lived experience, to determine its meanings. Three themes structure the phenomenological description. In presenting this description, every effort was made to ensure anonymity when citing participants or discussing their responses, including the use of pseudonyms, and removing anything that might identify any participant. The first theme is discussed in the next chapter.


Chapter 5 – Theme 1 – Silence, distraction, and focus

The first identified theme ‘Silence, distraction, and focus’ is discussed in this chapter. Pseudonyms are used throughout Chapters 5-7 and nothing is included which could identify any participant. Each cluster of meaning statements for the first theme are used as headings for the analysis to structure the report. For example, the ‘lived body’ clusters of meaning statements for this theme are:

1. Adaptation to silent study was required, as it was a new and different experience
2. Silence can promote undistracted study with positive learning outcomes
3. Change in the level of noise was disturbing
4. Silence although limiting was generally preferred for practical reasons
5. Home study was not usually silent, but some participants found a way to deal with this
6. Silent study can reinforce understanding, but cannot provide help from peers

This theme and this chapter is all about silence. Silence is examined through the lens of each existential in turn. The lived body existential is the predominant one for the first theme since silence is primarily an experience of the body.

Lived body

Adaptation to silent study was required, as it was a new and different experience

All participants indicated they were initially anxious or nervous, had preconceived expectations, and were uncertain about the benefits of silent study. However, it did not take very long to adapt to the entirely new experience. Ryan’s description was typical:

I guess I was kind of happy that it was my time to do my own work and just getting used to it is the hardest thing. The first week I guess I was just kind of sitting there and thinking to myself ‘what should I be doing; what should I be doing’? So, I was kind of a bit nervous
about how I was using the actual study period to whether I was actually getting benefit out of it. And then I guess I started feeling more comfortable in there as the weeks went on and as the work started coming in as well from other classes. So, it definitely took a while to adjust and getting comfortable in there. Now I’m happy being in there and actually doing my own work and it’s reflecting into my class work as well.

Similarly, Tristan got over his nervousness once his own first study period began: “I was quite nervous waiting outside and I came in and I sort of forgot about everything else and just got on with what there was of my homework, which I had left over”. Cameron settled into silent study very quickly: “I just noticed immediately that I had no distractions and it was a lot easier to get into a zone of...I was a lot more efficient”.

While all participants except Luke (discussed later) liked the silence, they found silent study different from anything they had experienced before. The silence was described as total silence, not only lack of irrelevant talk, but also lack of relevant talk. Nathan called it “pin drop silence”. By way of contrast with subject classrooms, nine participants said that most other classes tended to be quite noisy. Ethan described subject classes as “like a fish-market”. William described the difference in silent study:

When I first went in [to silent study] it was different being in a silent environment compared to a normal classroom where there is a little bit of noise from everyone and it is different, but I find it useful to be there. I think it’s a good thing.

While these participants said that classroom chatter contributed most to the noise, as did respondents in Lundquist, Holmberg, and Landstrom’s (2000) survey of 216 Swedish students, the Swedish researchers found the other major source of classroom noise was chairs and tables scraping on the floor. No participant in my research mentioned noise from furniture movement.

A study of measured noise levels in 274 lessons in classrooms in England (Shield et al., 2015) confirmed classrooms were often noisy. This is partly due to acoustic deficiencies (for example poor sound insulation), but also to students talking during lessons, about relevant as well as non-
relevant issues, and from disruptive behaviour. The authors noted that the highest sound levels in lessons were in science classrooms, and that sound levels increased as the number of students in the class increased, as might be expected. The average difference between noise levels in an unoccupied room and those in a lesson was found to be thirty decibels (Shield et al., 2015), although it is noted that normal conversation is around sixty decibels (K. Greene, 2015).

Students in my research stated that noise in classrooms was not necessarily a concern for them. A lively interactive classroom was generally well-suited to the topic being taught as other researchers found. These included Jagger (2013) and Pritchard and Woollard (2013). A social constructivist explanation might suggest that a teacher is pivotal to effective and productive learning in such a classroom. In that setting the teacher’s role is similar to that of a facilitator because individuals “construct their own understanding” (Pritchard & Woollard, 2013, p. 37) through social interaction. This is different from the kind of learning that takes place in silent study which is a solitary process, but one the students still associated with learning. Michael’s description of the new experience of silence was typical of all participants, “as you walk into study period it’s just silence”. Nathan commented, “sometimes you do need to have your own silent time…it’s nice to actually be able to hear yourself think”.

Owen described silent study as involving “individual learning” as opposed to whole class learning from what is taught and discussed in a classroom. These responses are consistent with the finding of Jaworski and Sachdev (1998), that secondary students recognised the importance of silence for learning. By ‘learning’ the students in their research stated that they meant the process of making course content their own, either in class or at home, and by ‘teaching’ they meant the formal instruction by teachers in lessons. Participants in this research defined learning and teaching in a similar way. This mechanism of learning taught material is what social constructivists think happens as students discuss ideas, and in the process, manage to internalise them, and work them into their own learning framework (Pritchard & Woollard, 2013). The latter step is what can happen in silent study once students learn to adjust to the new experience.
Silence can promote undistracted study with positive learning outcomes

All participants except Luke were positive about the silent environment. They said that silence increased their focus, efficiency, and/or productivity. Participants gave similar descriptions of these terms. Focus was ‘concentrating on the learning tasks’. Owen said the silence “isolates you and allows you to focus on the aspect at hand”. Adam found it easier to focus in silent study than in subject classes or at home, as did Jordan. Efficiency was regarded as ‘not wasting time’. David, like most participants suggested the silence made him “do quite a lot of work” and found it “really good for my efficiency”. For participants, productivity was ‘how much was achieved’. Nathan, in words similar to most, stated that, “in that kind of environment you can be extremely productive”. Henry found, “it was quite different to being in control of your own productivity during that time in contrast to other classes where it’s more structured”. Justin liked the silence, but for him there was a further factor: “It was nice and cool in there and really silent which was good”. The positive effects of silence corroborates the findings of Lees (2012) and Irwin (2007), but not Eddles-Hirsch (2009) as discussed in the literature review. Eddles-Hirsch’s research was with primary gifted students which might suggest silence is more suited to older students. Boys like to be given the opportunity to solve problems on their own (Reichert & Hawley, 2009, 2010) and the Year 13 boys in this research are learning subjects with complex material. Zembylas and Michaelides (2004) suggest the value of silence for learning is complex and not well understood. Caranfa (2004) claims learning is founded on silence and is “a means to self-knowledge” (p. 211). Schult (2012) agrees and Ollin (2008) suggests good teaching involves complex decisions about different types of silence and when to use them in teaching.

Six students reported silent study created a salutary atmosphere. Elijah, for instance, experienced it as “calming and quite therapeutic to have a quiet room for once” and Joseph explained, “I… felt excited…going in there; really excited about the peacefulness really of it actually in there, so it’s great”.

96
Participants also said that silence made them less prone to distraction and they saw it as the best option for study periods. Ryan stated that, “It really allows you to actually just get on with what you’re doing”. Julian said, “You can really get into the nitty gritty stuff that you don’t really get into at home sometimes when there are other distractions around”. Oliver reported, “Study periods are ideal for me because you can’t hear a thing. I feel without distractions I can completely focus on what I’m doing, and so it works”.

**Change in the level of noise was disturbing**

Participants did not like the silence to be disturbed and found such events distracting. Joseph raised the issue of the effect of someone disturbing the silence, “Once there is silence and, say, someone walks in or there is movement or noise, it kind of breaks the attention and everyone kind of looks. I feel I look and everything like that”. Yet unavoidable noise such as that from the adjacent building site was not seen as distracting, if it was unchanging. As Alexander explained, “I don’t think it’s necessarily the silence, but I think it’s the fact that there are no sudden changes in noise levels”. Other students felt the same when asked if the building construction noise affected them. William stated that, “Just kind of blocking it out of my mind” and Gavin likewise, “It’s really loud for a few minutes then I can just kind of zone it out because it’s just a constant kind of noise”. Oliver was sometimes slightly distracted by noises emanating from other sources: “Well, usually it’s dead quiet but sometimes I can hear the computers and stuff”.

Peter developed the idea further that change in noise level was what caused the distraction. He could and had studied with background noise, but decided silence caused less distraction: “I grew up in a very noisy household. So, I don’t mind studying in noise, but I’d rather prefer not to”. Likewise, Cameron said he could study in a noisy environment, but preferred silence:

I find that, like even with background noise, I can still get into, like get focused and ignore it; but it’s a lot quicker to drop into that zone. Like [in silent study] there’s focus almost instantly, it sorts of makes the time a lot more efficient.
These descriptions are in keeping with Bembenutty’s (2011c) description of noise which he viewed as a maladaptive influence in a learning environment, and also with previous research showing absence of noise encourages reflection and creativity (Alerby & Elídóttir, 2003; Zembylas & Michaelides, 2004).

**Silence although limiting was generally preferred for practical reasons**

All participants reported that silence was the only practical way of preventing avoidable sudden changes in noise levels. While this is similar to Bosacki’s (2005, p. 5) suggestion that silence is used to manage large classes, it is also consistent with her view that adolescents who are engaged in “structured class silence or ‘quiet time’…may experience positive emotions”. This view is also in keeping with previous research suggesting silence can have positive effects on learning. Some researchers holding this view are Jaworski and Sachdev (1998), Lees (2012), and Suhor (1991). In terms of what they viewed as the justification for silence, participants were aligned into one of three but slightly overlapping groups. All but two participants stated that they could not work properly without silence. Aaron said that, “I found if the environment in which I’m studying isn’t quiet then I can’t really work that well; just start overhearing what other people are talking about and getting distracted”. Evan had problems trying to get his work done at home because of the distraction created by noise. He explained, “Normally the only quiet I get in my house is when I wake up earlier to try to get more study done, like in the morning. My house is very noisy, and I do like the Study Centre much more”.

Four participants who generally liked silence also expressed the concern that when they came up against a problem they could not solve on their own, they could not seek help, and for them, this led to a degree of inefficiency. Most new learning is socially constructed, by collaborative interactive processes (Palincsar, 2005), but there is no provision for this in silent study. The many benefits of collaborative learning (Laal & Ghodsi, 2012) are discussed in Chapter 2. Silence for study may be effective for studying worked examples, but it may be less so for dealing with complex problem-solving (F. Kirschner et al., 2011). Typical of these four participants, Gavin said that:
When I have an issue it's kind of harder to go get help, so I could be stuck there for 20 minutes trying to work out an equation or something and just not know what to do. You're stuck in that position not being able to move forward or backwards really.

Justin felt the same: “For a lot of essay subjects you need a lot of different opinions to analyse and stuff and that’s where talking to other people and getting their opinions to help you as well is really, really helpful”. Owen also found other opinions useful for assisting his own understanding: “If another opinion is required or you’d like one to develop your own understanding it’s impossible”. Adrian’s response was different. He found that if he had the basic tools to solve a complex problem, but was finding it difficult, silence was helpful. He suggested, “When you’re having difficulty with your studying or a question or something, the silence helps a lot because you tend to get distracted by noise if you’re already having trouble with a question or a problem”. He found silence helped him deal with the difficult work because he was undistracted and could focus on finding a solution himself.

A third group of three similar ability students liked silence but were ambivalent about its usefulness. For example, Michael said, “I enjoy silence, but I don’t really think it’s changed my work as much as it has for other people.” Justin’s responses were similar to Adrian’s and suggested that silence can only work if you already have the conceptual tools that will enable you to proceed:

- The silence is good if you know what you’re doing…it [silence] doesn’t really affect me much to be honest compared to anything else. I mean if you’ve got a teacher controlling a class and guiding you in your work, then you’ve got something to pay attention to, rather than reading which I find is harder to learn from.

Henry, a gifted student in this cohort raised a different issue, that of also having to sit still so that the silence was maintained when he suggested:

- There’s probably a good effect and probably a flip side to silence. The good thing obviously, I believe, is to make you focus when especially you’re trying to memorise or understand
something. Silence is really good, no distractions...But on the flip side I’m a sort of jittery person who likes to get up, talk, and listen to music.

The ‘good effect’ of Henry’s issue is consistent with Bosacki’s (2005, p. 15) view that silence “provides the opportunity for adolescents to remain silent and to listen to themselves...[that is to] exercise their imaginative and creative abilities by listening to both mental and physical messages from within”. However, the ‘flip side’ indicates silent study may not suit everyone all the time. Bosacki (2005) recognised this when she argued that silence may sometimes have a negative influence on learning. However, most of the current literature on learning styles advises against using such differences in learning styles to affect what is done in any educational setting (Evans & Benefield, 2001; Newton, 2015; Pashler et al., 2008; Sharp et al., 2008), and this includes the issue of silence or otherwise for study. Henry indicated he accepted the learning environment had to provide what was best for the majority. Silence and individual movement cannot co-exist in a large class. When asked, no other participant found having to sit still an issue. Other different learning preferences (like listening to music while studying) are not accommodated in silent study in its present form, but it is acknowledged they are also important factors in the learning process for some.

**Home study was not usually silent, but some participants found a way to deal with this**

Participants were asked whether they had silence for study at home and to compare home study conditions with silent study at school. This was done to see if they thought they could work with noise, if they preferred silence, and what they did to get away from the noise or accommodate it. Some participants reported their conditions were reasonably quiet, but no student had total silence at home. In the words of Peter, “Even though there’s silence at home it’s never really, truly silent”. James noted the presence of background noise at home and added, “But yeah, study period’s definitely a lot more silent”.

Around half of the participants experienced only a small amount of noise at home which did not affect their study. Brian, for example, suggested, “My environment at home is quite quiet; not
necessarily silent because there are other people there, but still on low level, so it isn’t distracting to a large degree”. Four participants who experienced this low level of silence adjusted by ‘zoning out’. One reason for inescapable noise during home study was family activity. William, for example, explained: “Sometimes it is hard [to study] because I do have a younger brother and he does run around a lot”. Some, like Nathan, got used to it, but preferred the consistency of the Study Centre:

I do try my best…It’s not very silent [at home]. I’ve got quite a noisy family and I try to get into my room more, but a lot of the time I do end up studying in the living room or studying just anywhere really. I try to vary where I study but [Study Centre] is quite different from home because it’s a constant place where you go every time and you’re used to it. At home, usually maybe I might be studying in the living room or in my room.

Participants indicated their bedroom was usually the quietest place to study, and those who went elsewhere to study did so to escape temptations or distractions like computers (social media) or playstations or music players in their bedrooms. Three students including Ethan and Evan experienced more extreme noise, which Evan implied interfered with his study: “If I could have Study Centre in my house it will be much better because I never have quiet in my house”. Three participants preferred working at home to silent study, two because they could seek help, and one because he had more desk space and resources nearby.

If there is noise at home, it is usually hard to get away from. Learners with different learning preferences react differently to noise or to silence and what may be a maladaptive practice for some may be a coping mechanism for others (Bembenutty, 2011a, 2011c). The effect of noise also depends on the individual’s self-regulation attitudes and skills (Bembenutty, 2011a; Bembenutty & Karabenick, 2004).

**Silent study can reinforce understanding, but cannot provide help**

In Chapter 2 constructivist theories of learning are discussed, and particularly Vygotsky’s social constructivism which stresses that others, including other learners and teachers, are crucial in
individual learning and intellectual development. “Teachers who use a constructivist model of learning theory attend to the need to have students interacting in positive ways with others and actively engaging, at their own pace, in the process of knowledge construction” (Coupal, 2004, p. 590). Learners actively and mentally construct their own knowledge, meaning, and understanding from such interactions and engagements (Pritchard & Woollard, 2013). As discussed earlier, Vygotsky saw three types of tasks for this construction – independent not requiring help, those which a student cannot do even with assistance, and those which can be done with assistance. The provision of the personal space, time, facilities, and silence for individual study may provide some students with conditions that foster the construction of knowledge. However, only independent tasks are possible in silent study. Individual learning tasks which could be done with help cannot be done there.

Four participants expressed their frustration (discussed above) when they could not get help with work they did not understand, although one suggested the help could wait until silent study was over. Prior studies indicated that when students do not understand their work, obtaining help from one or more friends is the preferred solution (Carter, 1999; Jian et al., 2008). However, all these participants thought that to do this in study periods would mean study would no longer be silent, and with the size of classes, this could be distracting for others. Therefore, it would seem useful to consider making some provision for students to use some study time to get help, but away from the Study Centre. This practice would be consistent with research that indicates for complex problem solving a collaborative approach is better (Dhlamini & Mogari, 2013; F. Kirschner et al., 2011; Laal & Ghodsi, 2012; Sears & Reagin, 2013), although this depends on whether the problem is too complex for the individual to do on his own if he persisted.

The supervisor could sometimes help those who did not understand an aspect of their work if the query was within his level of expertise. The content of the Year 13 CIE courses is complex and requires good teaching, together with considerable classroom discussion and interaction. Silent study and collaborative group work are mutually incompatible, which may be a drawback to silent study sometimes for some. There was much discussion around a solution. I asked participants if
the school library would be a suitable place for collaborative group work, where students could work together on complex problems. Twelve participants thought time may be wasted if students were permitted to use the library for this purpose, as Tristan, for example explains: “You go in there with the intention of studying and talk about study for a little bit and the conversation will gradually just drift off topic after the first ten minutes”. However, if students went to the library for the specific purpose of getting help with complex problems, rather than for general study time, the time might not be wasted. Participants were concerned about the effect of any comings and goings from silent study for students requiring help and students willing to help them. They concluded that this would be distracting for the majority unless an exemption for the whole period was given. Currently silent study is compulsory, and the use of the school library is not available for timetabled silent study periods.

Although only the first type of Vygotsky’s learning tasks is always possible in silent study, the third type of task which requires help may be done there sometimes on-line; for example, as mentioned previously, through the Piazza website. Learning in silent study is not incompatible with a constructivist view of learning. Constructivists emphasise the value of the development of personal skills to learn or perform a task, such as note-taking to improve comprehension of a section of a text-book (Zimmerman, 2013). These learning tasks are possible in silent study, although the skills are usually learned elsewhere. An example of developing skills to perform a task is where students may perform better in a practical component of an examination after careful study of past papers with specimen answers and the corresponding examiner’s report. Nearly all participants reported they did perform better in external examinations by learning from studying past papers in this way. This individually constructed knowledge is a product of self-regulated learning. “Learners play an active personal role during learning and recall…a particular implication for self-regulated learning” (Zimmerman, 2013, p. 27) accepting that this applies to the first and the last of Vygotsky’s types of tasks, not just the ‘independent’ type. Individual input, effort, motivation, and engagement are essential in the learning process. This was generally recognised by students, and Damian’s comment was typical, “Study is something that you have to do by yourselves”. By ‘study’ Damian when
asked said that he meant the learning done in silent study. This concept (for all three types of tasks, not just the independent) is endorsed by Pritchard (2014, p. 32) who stresses that “learning is not something that others can undertake on behalf of learners. It is something learners must do for themselves…Learning requires effort on the part of the learner”, noting that this does not imply there was no other input or collaboration. Zimmerman’s and Pritchard’s statements align strongly with Hattie’s belief that “students construct knowledge and reality for themselves” (Hattie, 2008, p. 26) for independent tasks, tasks assisted by another, and tasks somewhere between these two. On-line group work has not been used in silent study, but there is no reason why it could not be available if pre-arranged, and if students maintained the silence. Maintaining silence for students at the computers is more difficult since the computers are adjacent and not separated.

Charles B. Hutchison (2006) pointed out that people from different cultural backgrounds construct different meanings from the same experiences. Thus, multiple realities emerge from the same experience because “knowledge is partly influenced by culture” (Hutchison, 2006, p. 308). There needs to be much discussion and shared understandings before students can come to common understandings. For example, the scientific phrase ‘has a tendency towards’, proved difficult for a participant for whom English was not his first language because there was no equivalent in his first language. However, his understanding was developed collaboratively with me and others outside silent study after he had tried unsuccessfully on-line using a thesaurus during a silent study period.

Silent study utilises what Lees (2012) calls ‘technique-less silence’ as opposed to ‘techniqued silence’ or ‘strong silence’, as discussed in the literature review. My research agrees with Lees’s findings that silence can be a positive power or force in learning and with those of Irwin (2007, 2009) who suggested it can have a positive effect on learning. My research complements Lees’s work on the value of silence in schools, because her data was drawn from teachers, whereas mine was drawn from students. Participants’ responses confirmed the value of silence for individual study, by aligning with its suggested value in learning generally, from previous work in this field (Alerby & Elídóttir, 2003; Lees, 2012; Zembylas & Michaelides, 2004).
Lived space

Large size of the room produced some negative and some positive perceptions

Lived space is felt space (van Manen, 1997b). Twelve participants experienced the space as ‘huge’, the number of people in it as daunting and the room intimidating at least at the start. Four participants, three from a large study class and one from a small study class re-iterated Andrew’s thought, “the silence kind of added to that”. Within the school context silence seems much easier to obtain in a large room where students are widely separated from each other, which is partly why examination centres have desks arranged in this fashion. Luke was the only student who said that he felt inhibited and uncomfortable not only by the room, and the number of students in the room, but also with silent study, “because you don’t really get that other than during exams”.

The Study Centre doubles as an examination centre at examination time. Because of the number of students that it was required to accommodate, the room had to be big to give each student his own space, either for study or for examinations. After adjusting to silent study, most participants saw the room size as a positive feature as Joseph, for example, said that:

> It feels like there’s more space for people to do what they want to do in there. It just feels like everyone’s kind of allotted their own section of what they have to do and it all fits in nicely.

One of the positive features was the feeling of security engendered by the large space and the individual’s own area isolated from others. Paul commented, “It’s such a huge room; it puts us in more of camaraderie with our other peers who are also using the time, the same way as us”. Julian explained the effect the room had on him: “It’s like a sense of security that the room gives…it is a very closed environment. It kind of takes you away from everything else”. Participant thoughts about the space are in keeping with Alerby and Elídóttir’s (2003) observation that silence as a pedagogical practice has value only if it is experienced in an appropriate space.
Silent study encourages thinking and reflection

In the Study Centre space, with silence, students could sometimes choose to reflect and contemplate their schoolwork, their relationships, their hopes, their dreams, and their future. Alerby and Elídóttir (2003, p. 49) call the type of silence that encourages such reflection and contemplation “internal silence” and suggest it “should be respected and valued”. It is the opposite of “oppressed silence” where the individual “does not have a voice” (Alerby & Elídóttir, 2003, p. 49). Van Manen’s concept of lived space includes cyberspace, and a student’s “inner world” – such as his secret unspoken thoughts – as well as his “outer world” (van Manen, 2014, p. 305). Elijah, as with seven other participants, expressed a contemplative view of some study time:

Reflection at times. Quiet thought, I guess…it’s kind of just a place to think about what the day’s been like and reflecting on class and on school and occasionally the future…you kind of spend more time considering the future in study period so it’s kind of solidified in my mind what I wanna do.

Elijah’s thoughts are similar to those from several previous studies examining the value of encouraging such inner thinking, using what Lees (2012, p. 82) calls “silence practices”. These studies include Bembenutty and Karabenick (2004), van Manen (1997b), and Walkey et al. (2013). William also felt silent study helped his decision-making about tertiary study: “I don’t really know what I’m gonna do next year yet, but I believe that the study periods are helping me decide”, and Alexander found the same. Julian described silent study as “almost like a break in the middle of the day; it’s quite good because it’s time to relax from the subjects and whatnot”. These examples again illustrate van Manen’s (2014) concept of lived space as something that also includes an individual’s secret unspoken thoughts. Lees (2012, p. 41) argued that schools need to “offer space for reflection” in order to allow students “to just be, to think original thoughts and to find self-confidence to pursue inner realisations and expression”.

106
Silent study is like study in the silent study space of a library

Elijah and five others thought the room seemed more like the silent study areas of a library than a classroom space: “Yeah, the large hall, you feel like you’re almost in a library, where you kind of just sit there, and you’re doing your own quiet work, rather than actually in a classroom”. Nine students indicated study at school was like, and as effective as, study in the silent study area of the University library. It appeared to be quite common for Year 13 students to study there around examination times. Jordan sometimes went to the library with friends to utilise it for study. Evan went to the library frequently, not just at examination times because he could not find a silent space in which to work at home: “My parents won’t stop talking to me – they won’t shut up and let me get on with my work!” No other participant gave this as a reason, but rather they went there because they found the quiet library space conducive to study.

Paul’s description of his study in the University Library did indicate two differences compared with the Study Centre:

   I can talk quietly if I want to or need to…It [the Library] is basically, totally silent, until you break the silence yourself; but you are split up enough from other people. There, it seems to be rather than a feeling of not wanting to talk to not get in trouble; like I would feel like it is in the Study Centre. It’s more a feeling like you don’t want to talk to mess with the other people that are trying to work there and have gone there as a silent place to be, away from distractions.

When asked how the University library staff viewed the use of the library by school students Paul replied, “They don’t even look up when you come in”. At the University Library, in contrast then, students made their own choice whether to be silent or not. Silence was not requested but left to individual preference assuming good self-control. However, most library patrons did choose to be silent in the designated silent area. At school, Paul felt ‘getting into trouble’ for talking would apply, and although no other participant mentioned that, some might agree with Paul. There was a general feeling that the library space inspires more self-discipline, that is, more adult behaviour, than school.
Although some participants were also doing University study, and had the advantage of access to all the University Library resources (Massis, 2015) which could be valuable for their Year 13 schoolwork, no participant gave this as a reason for being there.

**Lived time**

**Participants viewed work output as a measure of lived time**

The most important aspect of time for all students was not so much chronological time, but rather time perceived and measured by the quantity of work done. In the silent class, all students generally found more time seemed available for learning tasks, because there were fewer ways in which they could indulge in activities not related to learning. Nathan said that:

> I think sometimes you do need to have your own silent time…I find it really useful that I’ve got some time during the day where I can actually do some of my own study, which can help me at home as well, so I have extra time.

All but two participants stated that they used the whole of the forty-minute study period for effective work. Any time spent on work in silent study meant less time had to be spent on school-related activities at home, particularly homework. Other things that took up time for these Year 13 boys were sports, cultural events, music, and drama. Some Year 13 students had very little free time because of extensive extra-curricular activities as expected for boys from high decile schools and high socio-economic homes (Allatt, 1994; Steinberg, 2014). Benjamin was typical of those with heavy sporting commitments:

> I am a competitive swimmer and so I train nine times a week…for three to four hours and then about two hours of transport on top of that …and have very little time and energy left for doing homework…it was very helpful having the study periods because it gave me extra time that I was able to do work in.
Some managed their time for these things well, or made effective use of silent study for homework, that they had more leisure time to give variety to their lives.

**Silent study gives students more free time**

Any time spent on work in silent study means less time that needed to be spent on school-related activities at home, particularly homework. Julian put it like this:

> Obviously, the best part has been less homework at home because I have time to do it at school which is great, and then obviously, you can get your extra-curricular activities done then, and then there’s time to either relax or do more school-related stuff.

Christopher had a similar view: “I just go into it thinking that it’s time in which I can get things done and use that time to relieve the burden that you would have at home or anywhere else”. Silent study students have more school time that they could choose to spend on homework than other students and thus more time to spend on extra-curricular activities. While there is disagreement about the relationship between time spent on homework and achievement, Kalenkoski and Pabilonia (2016) reported a small positive effect for boys. Other important factors affecting achievement, where previous studies agree, are school attendance and the quality of the study time (Dollinger et al., 2008; Plant et al., 2005), although Fernández-Alonso, Suárez-Álvarez, and Muñiz (2015) argued that prior knowledge was the most important factor.

**Lived human relationships**

**Distraction from other people is minimal in silent study**

Almost all students commented on the lack of distractions or disturbance from others, or interactions between others, in silent study. Ethan decided “it was pretty good because you could study without any disturbance from somebody else”. Benjamin’s main distraction in other classes “is people and talking to other people.” James agreed and added, “Personally, it [silence] helps me concentrate…I don’t think study period would work if I could talk because I’d just talk to my friends”. Nathan’s
view was typical of several: “Some people think that talking with your peers is productive but on the other hand what most likely happens is you usually get distracted and end up wasting time during group studies”. Anthony said that there was no time in silent study when he needed to talk. Since his words express varying relationship ideas they are reported in full. First, he considered non-silent study. Then he expressed the human relationship conflict when he could not talk to his ‘mates’ about his work and the effect of that imposed requirement. This was followed by a consideration of what he decided was the best approach for study at school:

Say there’s no silence… you [the supervisor] can’t work out whether someone’s checking to their mate about the weekend or checking with their mate about work. I know I like talking to my friends a lot about work and so it seems kind of sad for me that I can’t talk to them. I learn a lot of the stuff from my friends. I go, ‘How do you do this?’ and they go, ‘Oh yes, this is the easiest way to do it.’ I go, ‘Why do you do it this way?’ I guess I can do that in class if I need to. It [silence] is probably the best way of doing things. For me, myself, I would like there to be maybe whispering, but that wouldn’t really work, because there are a lot of people who aren’t like me and would actually just talk about the weekend and wouldn’t actually get any work done. So, I guess it’s the best that you can do.

Anthony would like to be permitted to talk quietly or ‘whisper’ and thus learn ‘stuff’ but doesn’t trust others to do the same without wasting time in irrelevant chatter. What he thought would work for him, he thought would not work for everyone else! He did not have much faith in the ability of his peers to work independently. He saw the supervisor as a needed authority figure.

Paul also found it difficult to exercise appropriate self-control and also appeared to need the supervisor as an authority figure, to control his ‘urge’ to chatter:

It [silent study] definitely makes me work harder. I tend to talk [in other classes] usually so it makes me not… as I’ve said, the lack of distraction is definitely useful. I try my best not to [talk in other classes] but it’s always an urge, an impulse to want to at least, even just about the subject.
Yet, as recorded above, Paul did have appropriate self-control working in conditions like the University Library. When asked about the difference he said that he did not know the other people working in the University Library, most were older than him, and they were engrossed in their work. Most other participants thought irrelevant talking would affect others and their ability to work. Damian’s view was typical: “I can’t concentrate when there are a lot of people talking”. While Elijah agreed, he did not even want to know what others thought:

The silence aids the work of my study because you can think more clearly, have a better chance to formulate your ideas when you’re on time with your own thoughts, rather than having to hear other opinions and other questions going on; it’s the focus aspect that I value the most.

The supervisor has always been regarded by students as ‘a teacher’ and representing authority. The need for an authority figure in silent study may delay the development of self-discipline by encouraging students to rely on the supervisor’s management to minimise distraction from other students. Allatt (1994) suggests parents of students from privileged homes such as those in the research school believe in structure and order for promoting hard work, and pass this belief on to their children. This may explain why some participants appeared to need an authority figure in school study to maintain the order considered valuable by parents. However, this is not consistent with Allatt’s finding that such parents also valued and nourished “independence, responsibility, self-motivation and individualism” (Allatt, 1994, p. 149) and so the reasons for some participants having to rely on an authority figure are more complex than this simple explanation.

**Materiality (lived things and technology)**

**Social media notifications can distract homework**

At home, landline and cell phone calls, text messages, social media notifications, or email notifications were sources of distraction for some participants. There were three categories of student response to sound notifications. The first type (fourteen participants) had social media sites
on a tab on the computer and their cell phone on; and responded immediately to any sound notification. Seven of these admitted this was a major cause of distraction at home. The second type (four participants) used social media as a reward or incentive, usually during a break and said they exercised self-control in managing social media. They did not regard social media as a distraction. A third type (remaining participants) included those who did not respond or got away from the temptation during their home study time.

Ethan was in the first category: “At home I usually just put Facebook on another tab and I get really distracted by all my sites at home”. David had Facebook on another tab on the computer “just in case someone messages me and then I feel the need to respond. Also, I have Facebook on my phone…at home I get distracted by my phone especially”. David was also distracted by YouTube and said that he would “sometimes multitask”. This is consistent with Judd’s (2013) finding that Facebook users were more inclined to multitask and that their learning was less focused as a result. Concerning social media notifications, Alexander said that, “I wouldn’t say it’s out there directly in front of you, but since there’s so many notifications and it’s just really tempting to go on sometimes…it’s always in the back of your mind and it can prove pretty distracting” and Peter explained the effect:

Homework takes me three times as long when I’m doing it at home than I do it at study period because at home I get distracted by my phone, Facebook, and YouTube. It’s there in the back of your head and you feel the need to check it just in case someone messaged you.

Benjamin said that social media “distracts me a lot. It’s probably one of the reasons why my study isn’t as good as it could be because it’s so easy to get distracted by it”. Time, or better, effective time, spent on homework correlates positively with academic achievement (Cooper, 2007; Cooper et al., 2006; Hallam, 2004; Trautwein, 2007). Those participants who reported distractions caused by social media affecting homework time provide further evidence to support Xu’s (2010) and Junco’s (2012) findings that this has a strong and negative impact on academic performance. This
group still needed to be scaffolded into self-regulation despite the advantage of their background as discussed in Allatt’s (1994) research above.

Henry was one of the four students who had already developed self-regulation skills and were in the second category: “I get many people that argue they’re distractions. I use them as incentives. I have a faith in my attention span that I won’t abuse them; I’ll use them”. Justin agreed, but with a reservation: “Facebook and stuff can be used as incentives but as long you do have the self-control not to just stay on it the whole time”. Paul felt the same: “I would definitely clear my notifications after each block of study [40 to 50 minutes] at home…maybe I’m always conscious that there might be something. So, it probably is a distraction, but I try not to let it be too much”.

Students in the third category did not allow social media to affect their homework and had also developed self-regulation skills. James left his response to social media until his homework was finished:

Personally, I don’t study on the computer at home, but I have my phone and my iPad there which give me notifications and I get messages and whatnot on Facebook, but I try to avoid answering them until I’ve finished studying.

Michael avoided what he regarded as sources of distraction:

I can’t study with Facebook open because my room has a desktop on my desk and I can’t really move that away from my room; so, what I do is I just turn off my computer, I put my phone on my desk and I walk downstairs and I just study at the dining room table… I can just study wherever I want except for my room ‘because it’s too distracting.

Aaron also studied at the dining room table and explained why: “I can’t just move it [the computer in my room] out, so I have to move away”. William avoided distraction from his cell phone:

I generally leave my phone downstairs when I’m doing homework and studying upstairs…I don’t really go on Facebook that much. I don’t own my own laptop or anything. So, that’s all downstairs as well…I’d use it [the family computer] purposely for what I’m researching.
Johnson (2009) and Fairlie (2016) found that New Zealand computer literate teenagers rely far more on print material than on Internet sources for formal learning, and Smith, Skrbis, and Western (2013) found that older students use the Internet considerably more for social media than for academic work. Boys tend to use computers more for games rather than schoolwork but less for social networking and emailing than girls (Fairlie, 2016) although social networking is the most common activity for older high school students (Cheema, 2015). Şaşmaz et al. (2014) found 20.4 per cent of 16-year-old European boys were addicted to the computer compared with 9.3 per cent of girls. Judd’s (2013) advice, to leave social media multitasking to breaks between suitable periods of study, is sound for those who want to achieve academic success. Students may be advised when they are studying at home to do so away from cell phones and computers.

**Music playing while studying may affect learning**

A few students had comparative quiet at home, but, all but six participants had music playing at home sometimes, or even all the time, while they studied. Elijah listened to music all the time, but found it slightly distracting:

> I listen to music, not loud music, but…kind of…a YouTube playlist involved studying, so I enjoy that as well, but it does detract slightly from my thought processes because I can get caught up focusing on what I’m listening to.

When asked why he had music playing, he said that:

> Because otherwise I find myself losing focus or I’d have a distraction, I’d want to go and check my phone, go and look at something that’s happening, go and talk to somebody…The way I study in study periods is definitely more efficient.

I asked Elijah why he did not then study in the same way at home and he replied, “Because I don’t have the willpower. I wish I did but all I can say as a 17-year old, I do not have the willpower”. Effective study for him seemed to require an authority figure as there is in silent study. While responses from three or four participants indicated they relied on an authority figure (the supervisor) for direction in silent study there was no evidence the others did. They suggested they were mature
enough to manage this by themselves without much direction. The judicious exercise of will-power or self-control without the need for authoritative direction is important in the acquisition of skills for successful tertiary study. This will be discussed in the next chapter.

Benjamin said that, at home, he liked to have music playing because it helped him focus:

> Probably around sixty to seventy percent of the time [I study] with music... Usually it’s just playing in the background, so either the radio or a few artists that are in my favourites. It can change your mood I guess; if you’re in a bad mood, music can help you get into a better mood and then you might do more work and be more focused.

For him, music could enhance his study. Justin held a similar view: “Music just relaxes me and gives me an incentive to actually do something”.

Three participants justified listening to music by suggesting that ‘research’ (unspecified) showed it was beneficial. An often quoted study (Rauscher, Shaw, & Ky, 1993) of college students found that listening to the first ten minutes of the Mozart Sonata No. 23 for Two Pianos in A Major, K. 448, scored better on a “spatial-temporal reasoning task” (Rauscher et al., 1993, p. 611). The effect lasted only for the first ten minutes afterwards. The *Los Angeles Times* coined a phrase “the Mozart effect” (Rauscher, 2002) and the popular press drew unwarranted conclusions from incorrect reporting, to the horror of the authors. The lead author, nine years later, stated emphatically that, “there is no evidence at all for the claim that listening to classical music CDs improves children’s spatial-temporal reasoning - or any other aspect of intelligence, for that matter” (Rauscher, 2002). An extensive meta-analysis (Pietschnig, Voracek, & Formann, 2010) came to the same conclusion. Other researchers disagree, and, for example, Taylor and Rowe (2012) found having Mozart playing throughout mathematical assessments improved test scores for College students. No participant indicated his preference for classical music for studying. For the research school students, music could be relaxing, or it could be a distraction and, as the participant responses indicate, this varies with the individual.
Participants’ descriptions of home study corroborate the findings of Bembenutty and Karabenick (2004) that there are many distracting temptations at home. Some students like Henry (a gifted academic) reported a greater academic delay of gratification. This is consistent with Bembenutty’s (2011a) finding that students with greater academic delay of gratification have greater academic success. Both the maladaptive and meaningful practices extracted from the participants’ descriptions are entirely consistent with those identified by Bembenutty (2011c).

Two participants raised the question of having music playing while studying at school because they found it helpful at home. This is currently not permitted at the school for any class, but Brian suggested it could be beneficial for study:

> I did mention how I utilise music a lot in my study; I guess by allowing the facilitation of that, I mean, for a person to choose whether or not he listens to that kind of stuff; whether they find that a personal benefit and so could make use of that to add value could be an option I guess.

He did not discuss further, if that would work at school, as Henry did:

> It could be useful if you could bring your headphones and maybe use it at your own liberty, at your own choice. But again, many people will abuse it and I guess for the whole population of the school it probably won’t be a good idea but just from a personal point of view.

This concept, that ‘I would be fine, if certain liberties were allowed, but others might abuse it’ was suggested by four participants. They seemed to be saying they did not need the rules because they would comply anyway but seemed not to trust the maturity of their classmates to do so. A study of college ‘millennial’ students (Much, Wagener, Breitkreutz, & Hellenbrand, 2014) found they ‘routinely’ said that they did not need rules, but that their classmates or peers did. They blamed others for misdemeanours when they were clearly at fault themselves. The authors suggested they relied on authority figures rather than accepting responsibility themselves because “millennial
students are being raised in a more sheltered and protected environment in which adults are there to intercede on their behalf” (Much et al., 2014, p. 44).

Summary

This chapter explained how participants found silence for study minimised distraction and helped them to better focus on their learning tasks. Participants had to adjust to the silence because that had not experienced before in classrooms, but this did not take long. They said that silence helped to minimise distraction, so they could focus on learning tasks with resulting positive learning outcomes. Participants preferred study to be silent. While silent study could reinforce what had been learned in class a disadvantage was that it did not provide any chance to seek help from others. Noise outside did not affect participants’ focus provided it did not change. Those who had background noise at a home found a way to deal with that in the same way as with noise outside in silent study.

Participants found the room large and intimidating and more so those in the larger study classes. They had a sense of ownership of their desk which they viewed as their own space. The conditions of silent study were said to encourage contemplation together with thinking and reflecting on one’s future. Participants found they could study in the Study Centre in the same way as they could study in the silent area of a library.

Since study time was generally used effectively students gained more time for the extra-curricular activities expected by parents and the school and for leisure activities. Another gain was less homework at home since some was done in study periods. While some suggested replacing some study periods with study time in the library for seeking help from peers, most feared the library time would be wasted as it was unsupervised.

While participants reported the main source of distraction in class was talking to other people or other people talking to them, this did not usually happen in silent study. In fact, they were motivated by the example of others working hard in silent study. A few participants relied on an authority figure (the supervisor) to maintain the silence. Silence did permit students to focus clearly and
purposefully on developing and clarifying their own ideas and thinking. Silence had the disadvantage that it did not permit students learning from other people doing the same subjects as is common in classrooms and in other places where groups of students gather. Participants generally suggested the advantages of silence outweighed the disadvantages.

Participants found an advantage of silent study was not having to make choices about possible distractions like social media and music. Those who suggested changes such as allowing music playing while studying at school argued that they would not abuse this, but others would. The next chapter develops the second theme using the same process as this chapter.
Chapter 6 – Theme 2 – Planning and learning activities

This chapter interprets the second theme related to planning and learning activities, using the same process as in Chapter 5. Again, the chapter is structured by discussing participants’ experiences through the ‘lens’ of the five lifeworld existentials. The emerging findings are discussed with reference to the relevant literature. This theme examines the planning, the learning activities, the learning process, learning outcomes, and participants’ descriptions of how they used silent study.

Lived time

Silent study could stimulate wise choice, goal-setting, and appropriate learning activities. Since the school chose to allow Year 13 students to have one-fifth of their timetabled school time for silent study, time is the predominant existential for this theme. Silent study as a lived experience would not exist if the school time was not provided for it. Heidegger, in his Being and Time (1927/2008) suggested that being is time. The various portions of time allocated at school for different learning activities is what constitutes the nature of students’ ‘being’ for the hours they are at school.

Silent study gave students more time for other things

Effective use of silent study freed up time for students aiming for high external examination grades. The amount of time spent on periods of study may improve grades (Flunger et al., 2015; Kalenko& Pabilonia, 2016) but other factors like the quality and focus of the study and prior achievement must be taken into account (Plant et al., 2005). Participants aimed to keep weekends free of study if possible by getting as much done in silent study as they could. Andrew said that, “if it’s a Friday I’ll try do my homework, so I’ve got more time to just chill on the weekend”. Nathan’s and Anthony’s views were similar. Nathan indicated what he usually does in silent study:

But most often I usually catch up on some study and I find it really useful that I’ve got some time during the day where I can actually do some of my own study which can help me at home as well, so I have extra time.
Anthony suggested, “It’s just a really valuable part of my time and so I cannot have to do my homework at home. I can do other more valuable things at home”. Adrian also regarded silent study as something that gave him ‘free time’:

I try to get all my homework done before I go [from silent study] because I take a [university] psychology course. So, I try to get all my homework done, so I can have some free time, ’cause I don’t usually have so much free time, and study period provides that.

Other participants also took this University paper. Adrian is a high achiever academically and regarded his ‘home time’ as his leisure time. Therefore, he was reluctant to use any ‘home time’ as study time. He told me that he did not have to spend time at home or at school ‘learning’ his psychology for his University papers, because he did that during the lectures and that was enough.

Comments from twelve participants indicated silent study improved their homework completion rate, in accord with a similar finding from a study of a tutored study hall (Dicken et al., 2008).

**Freedom of choice was liked**

Participants said that it was good to have the freedom to choose what to do, when to do it and how long to spend on chosen topics, without teacher direction. In other classes students are used to being told what to do, and set homework rarely contains any choice apart from essay topics. As Peter indicated, “study period, it’s your own time where you can just sit down and study and do what you like” and Aaron agreed:

I personally found it more liberating to an extent because in class we have to do what we’re set, but in the study periods we choose which subject we want to work with and from that we can also study other things and read books.

Andrew found silent study relaxing because he had control over what he did: “It was nice, though to have a certain kind of control over what to study, which allowed me to relax a bit”. Adam agreed: “It was a relief to “not have someone breathing down my neck saying, ‘you have to do that’”, as did Damian, “There’s no one telling me what to do”.
Planning for silent study was generally ad hoc

For almost all students their planning was ad hoc, decided on arrival for silent study and based on the perceived need on that day. Priorities for what to do in silent study emerged as the school day unfolded. For some students, what was chosen depended on when silent study was timetabled that day. Alexander explained his priorities: “If it’s earlier in the day I usually try to either catch up on any missed work or study and/or consolidate on the day’s work from that lesson”. Justin’s view was similar: “I find out what period I do have study and that sort of determines what I need to do at home and what I can do in study”. Peter’s response was typical of several:

I just have a broad idea of what I’m going to do... in study period it’s what you want to do that day; so, if you want to study chemistry you can just study chemistry. If you want to write notes; if you want to do homework… and it’s just the atmosphere as well is just perfect for that type of environment to study”.

Charles chose to do “just whatever comes to mind really; whatever you feel like doing at one time”.

Adrian’s planning was short-term: “I usually plan it as I’m going to study period - just whatever homework was set for the day”.

Nine participants used silent study particularly for those subjects that they found difficult as Michael reported:

What I just do is I see which subject I am kind of bad, I’m behind in the class or I am not as ahead in, and I bring that text book to school for study period and I’ll study that after I’ve finished my homework, if there is any in the afternoon… During study, I would write notes on the work as I go ahead in class.

Owen’s response was similar: “I decide beforehand which subject I’m struggling with at the moment and then I’ll just focus on that subject for the whole study period - that’s including homework and extra revision”. Gavin was different in that he decided what was most important for him to do first: “When I sit down, I think of what work I’ve got to do, and what’s the most pressing for me, and I’ll
get onto that as soon as I can”. Elijah did the same initially, but also used silent study to relax, if he needed to do so after a long day:

> So, I kind of use that time to find an area of need that I am behind in or something like that, to focus on that and try and catch up, get up to speed on that…or if need be, I’ll spend ten to fifteen minutes reading a book because the day has been quite taxing; so sometimes it’s quite a nice break from intense learning.

Three students did indicate planning in advance. Henry planned for all his work: “I have a set plan at home which I follow at the Study Centre as well. Aaron planned in advance: “I always plan out the night before, so I know what to take into the study period”. Ryan did the same: “I plan beforehand, the day before, or before I go in there what I’m gonna be doing.” There was evidence from school reports that two of the three who reported they planned ahead were more self-regulated. Although no participant stated this specifically, comments from participants suggested students may need more help at the beginning of Year 13 on how to plan for silent study. Moos and Ringdal (2012) found that self-regulated learning is not taught or even talked about or encouraged by high school teachers, but Greene et al. (2015) found it can be fostered to advantage across a range of school subjects. Self-regulated learning was not taught at the research school or fostered in any way. Ollin (2008) suggests effective use of silence in pedagogy has to be taught while Ferlazzo (2015), Germeroth and Day-Hess (2013), and (Steinberg, 2014) suggest that strategies to encourage students to be self-motivated can also be taught.

**Several factors affected choice of what to do in silent study**

Several factors affected the choice of how to use the time in silent study. Students generally decided a priority for how to use silent study. Revision, done regularly, but particularly around school examination times, was a common use of silent study time. For eleven participants, planning for and use of study periods depended on when study was timetabled in the school day. Morning study periods tended to be spent on revising or absorbing difficult concepts and afternoon study periods for homework set in the morning. If study was in the morning they did not have homework to do,
and they concentrated on other learning activities. However, homework was a priority for most participants. Therefore, homework was done first, regardless of when the study period was timetabled, but for varying reasons. Fifteen participants did so because the homework had been set earlier in the day and the subject material was still fresh in their minds. Five did so because their study facilities at home were too noisy, because of siblings, parents, or family activities. While three participants suggested homework was intended to be done at home and it would be wrong to do it at school, most took the pragmatic viewpoint that the more homework they did at school, the less they had to do at home. Oliver was typical of most participants in finding, “even though I get the same work done, I kind of understand it more…it gives me that extra bit of time to really cement the ideas in my head”. Wise choices assist effective self-directed learning (Zimmerman, 2013).

**Homework was a priority in silent study**

The pressing need to be able to complete homework in silent study and present it when it was asked for the next day took precedence. There were several reasons. Teachers expected written homework to be completed, they were not very pleased if it was not done, and it could be checked. Even at Year 13 level, students would make sure they did homework to avoid getting into trouble with their teachers. Completing homework either at home or at school results in improved self-regulation skills (Bembenutty, 2011c). It improves attainment, and the participants’ excellent examination results (O’Connor, 2015) confirm the literature suggesting a positive correlation between homework completion and attainment as discussed in Chapter 2 (Flunger et al., 2015; Gustafsson, 2013; Hallam, 2004; Kalenkoski & Pabilonia, 2016; O’Connor, 2015; Trautwein, 2007). Bembenutty (2011c) argues greater distractions at home result in mis-regulation or failure to self-regulate. Since participants reported few distractions in the more structured silent study, the latter could improve self-regulation, homework completion and attainment. It is accepted that there is uncertainty in the literature as to whether homework completion does correlate positively with achievement or not (Dettmers, Trautwein, & Lüdtke, 2009; Kohn, 2007).
Adam’s approach for silent study was typical of most of the participants: “If I have any homework I’ll finish that off and if there’s like any areas in my subjects that I don’t really understand then I might go over them. Then I’ll just read my book”. Luke’s priority was also homework: “Usually I get all my homework done first, then, when I do have time, I will get some study done; just revision of the day’s work or something”. Oliver was the same, but he also wrote study notes if there was time:

Usually I plan to do my homework firstly; then I continue to do any revision of things that I’ve struggled with in classes and go over that until that’s crystal clear. And then last resort is that I’ll just take study notes on upcoming exams.

Another reason for homework being a priority was that distractions including social media could take over at home, and sometimes this happened unexpectedly. For those heavily involved in co-curricular activities, tiredness became a factor at night, and in turned affected homework output. Some students reported (and I confirmed the accuracy of the statement) that they had five hours training a day beyond school and almost full weekends taken up by a sport like water-polo. Homework could be done in silent study when one was rested after a good night’s sleep. Finally, homework went towards a course-work mark on the school report, and in a competitive environment as in the research school, it was a matter of pride to let that mark reflect one’s best effort. The individual effort and attainment in silent study was not assessed and it would have been difficult to do so, because of the numbers in some silent study groups and the variety of activities undertaken in silent study.

Peter and Brian gave a different reason for doing homework in silent study. Both reported they had effective study facilities at home. Peter liked to finish his homework at school “so at home I can just study instead of doing homework”. Brian found he could study better at home where he had more desk space and access to others through social media particularly via Skype: “Generally, I use the Study Centre as a kind of extra homework kind of period because I feel that I’ve a better study environment at home that’s more better suited for what I want to do, I guess”.
Lived body

Effect of school culture

The school has an effective culture (Education Review Office, 2011, 2016a). Research confirms an effective school culture enhances the expectation that students can make good choices for themselves on how to use the available study time, with improved educational outcomes (Education Review Office, 2016b; Gulsen & Gulenay, 2014; Martin, 2002; Wylie & Berg, 2014). The high end-of-year achievement for this cohort of Year 13 students (O'Connor, 2015) was a particular example of a good outcome and corroborated research that found a positive school culture has a major effect on achievement (Gruenert, 2005; Macneil et al., 2009; Marcoulides et al., 2005; Yahaya et al., 2010). Self-directed learners make their own decisions about how and what they learn (Gureckis & Markant, 2012) and since this is required and expected in silent study, participants were encouraged to be self-directed learners. Those that used these skills and sustained them effectively could improve their academic performance (Wilder, 2014), regardless of their academic ability (Steinberg, 2014). Participants responses indicated silent study was particularly useful for those with heavy extra-curricular commitments.

Silent study was valuable for learning or memorising

Although most students did homework before other tasks and regarded it as a priority, they also recognised the value of silent study for learning or memorising what had been taught. If silent study came after some difficult work in class on the same day, it presented an ideal opportunity for a student to absorb that material as Ethan explained: “I try to revise or study what we’re doing right then in class. I do subjects I didn’t understand or work I didn’t get”. James and Joseph also used the time for their more difficult subjects. James suggested he used study periods to “help me with the subjects that I’m weaker at”, as did Joseph:

There are hard subjects this year that I’m struggling with. I usually choose between which one I think I need to do the most at the beginning of the [Study] Centre and then I usually
apply it to those…sometimes it’s on the computer for certain subjects and sometimes it’s just rote learning through writing notes and everything”.

William used the time to “find an area of need that I am behind in…to focus on…try and catch up, get up to speed”.

Almost all students relied on past papers to indicate the type and standard of question they would face in school and external examinations. As Adrian explained,

I do past papers during study period as well and that helps a lot, just questions. Say in biology, I have to learn a lot of terms, and stuff. I just read the book and then close it and then try to remember it, and it helps that the study periods are very silent.

Paul regarded silent study as the best place for learning, along with the University Library which he used sometimes: “I tend to do homework at home, almost all the time unless I’m out of time for sports practice or something…So [in silent study] I would rather do either getting ahead or learning, read, or going over the previous day’s work”.

I asked Nathan how he learned and retained his study material and he replied:

For me, I’m asking myself questions. And maybe looking through end of chapter questions is really useful, because I actually realise that even though I’ve read over this information, if someone were to ask me a question about it I wouldn’t actually be able to explain it fully. And so, if you’re fully able to answer a question, then that truly shows that you actually understand the information. So, I try to always ask myself questions, as I’m going through my tasks.

For many, the silence affected the choice of how best to use the time in silent study, particularly if the home study environment was not silent. Most often the tasks involved committing something to memory, as Henry, for example, indicated:
I mainly use study period not for writing or creating, more as a time for remembering. So, that means I’ve written notes at home or in a class and I use study within the study period to try to remember and kind of memorise; so, it’s more my memorising time… I do read over and try and memorise my notes at home as well, but I find I invariably get distracted some way or the other and you sometimes lose a train of thought. I find it more efficient in Study Centre to try to remember or memorise a set of notes or learn.

These positive views of silence for memorising or learning what has been taught are identical with those expressed by the similar-age students in a study by Jaworski and Sachdev (1998, p. 286) where the researchers found silence was “positively viewed as a facilitative device enabling students to gain access, organise and absorb new material”. This silence is what Alerby and Elídóttir (2003) call internal silence. However, the authors also pointed out that in the classroom students could also view silence negatively when it involves communication breakdown and conflict. Alerby and Elídóttir (2003) call this type of silence oppressed silence. Communication is limited in silent study, and the chance of this type of conflict is low. Forrest (2013, p. 612) suggests that the duality of student views of silence arises from the “effect of years of being expected to be quiet one minute and vocal the next”. Thus, silent study students must adjust to silence, but participants’ responses suggest they did so in a matter of days. This may have come from a realisation that the silence may lead to a reflective process which promoted a better and deeper understanding (van Manen, 1997b).

Evan is an able student, but his parents distract him at home by talking to him or talking loudly on the telephone, which is why he takes full advantage of silent study to do what schoolwork he could not do at home: “I…try to memorise the core concepts that I learn in class… I… try to do calculation from problems that I’ve struggled with at home…” He thought, “the silence [is] very good since I like playing music in my head”. Evan is also an accomplished violinist and with further questioning he explained that he would mentally go over a piece of music that he had performed with a view to trying to achieve what he called “perfection”. Other Year 13 students described a similar process to think creatively, in English or Design, for example.
Transition to higher education

Several participants used silent study time to research or to reflect on their higher education goals. In Year 13, to make the successful transition to and achieve success in tertiary study, students require key skills (Gerstein & Friedman, 2016) in order to become successful independent learners. The American Management Association (2012) identifies these as communication, collaboration, creativity, and critical thinking. Communication involves synthesizing and transmitting ideas both orally and in writing; collaboration requires being able to work effectively with others from different backgrounds, deal with opposing viewpoints, and enhancing team building; creativity requires innovation, making things happen, and seeing what is hidden; and critical thinking requires an innovative approach in solving problems, good decision making, and taking appropriate action in problem solving (American Management Association, 2012). Other attributes promoting successful learning include a positive attitude, determination, adaptability, and computer skills (Gerstein & Friedman, 2016). Exercising will-power to control the urge to do more pleasurable things like watching television or using social media and/or music excessively is also important. Silent study may diminish the need for self-control because it is compulsory and silent, but on the other hand it may contribute to the development of self-control if it encourages students to learn to use the study time to their advantage. Since Vohs et al. (2014) found that having to make choices depleted subsequent self-control, limiting choice by making study periods compulsory and silent may develop self-control. Apart from providing conditions to assist critical thinking and to a limited extent creativity, silent study has a smaller contribution to the key skills needed for the transition to higher education than does collaborative learning, whereby most learning at Year 13 happens.

Lived space

Seating arrangements assisted engagement

Almost all participants said engagement in learning tasks was assisted by the fact that they had assigned seats and that the desks were in rows, and well-separated. To facilitate the marking of the
roll, students were arranged in alphabetical order. This had an unexpected benefit as almost all the participants explained. Ryan discussed how this affected him:

You just have your own desk that doesn’t change. It’s not random, it’s organised seating, so you’re always in that same place and it never changes…I guess the spacing; you can’t see anyone, so nothing distracts you. The only thing you’ve got is what you’re working on.

Michael also felt a certain ‘ownership’ of his desk: “Our desks, they have a desk space between us so it’s like your own desk. It feels like it’s your own work and you don’t really notice anyone else’s work, except for yours, because of the spacing between the desks”. Paul found that this spacing was a motivating factor for him:

I find having the desks apart, because of the uniformity of it maybe; it seems to still keep us linked without alienation as such, but also not distracted by each other at all. Basically, I feel like I tend to work better around other people. I also can feed off other’s motivation, so if I’m, for whatever reason, a loss of concentration for maybe a minute, or whatever, then just looking up and seeing everyone else with their heads down, gets me back into it very quickly. Just a good morale boost, I would think, at least for me.

The motivational effect of seeing others working hard will be discussed in the next section of this chapter, and in the next chapter. Three students also decided there was a management component with the seating plan, although none mentioned the convenience for marking the roll. Three participant responses demonstrated how much they seemed to depend on external motivations or control. Anthony was one of these:

There’s no mucking about. We know where to sit. The arrangement of the desks. How we’re not directly next to each other where it’s spread out with a little bit more space than normal, like an exam; that helps.

Benjamin decided the arrangement of the desks was “good because you’re evenly spaced between people and there’s distance so you’re not talking sneakily”. Christopher also included what he called
the ‘formal’ or management feature of the seating plan and discussed how sitting with friends might produce some unnecessary communication:

I guess the way nobody’s really together. You can’t as much be distracted by anyone else. It makes me feel like I can be more productive...the way everyone’s separated, so there’s no way of communication between people. It makes it more organised and a bit more formal than if you just walked in and picked a seat...because people will automatically drift towards their friends. Having everyone separated and in a specific seat prevents any of that interaction.

The stated benefits of organised seating are in accord with the findings of Her Majesty’s Inspectors in the United Kingdom who stated that there were motivational benefits for boys where teachers decided the seating arrangements (Office for Standards in Education, 2003), although this was more related to who boys sat next to, rather than their distance apart.

**Home or school was seen as better for certain tasks**

While almost all students said that homework in silent study was a priority, different students found either home or school was better for some tasks, but no pattern or common factors emerged to explain this. Seven students said that they found study periods at school better for ‘studying’, that is, committing taught material to memory. These participants did ‘homework’ at home. James put it like this:

I often don’t do homework in the study period, not because I find it less effective, but because I find the study periods a very good time for me to study, and I would rather do what I feel I need to do, than what my teacher wants me to do, in the time which I find to be most efficient. At home, I just do my homework at home because at study in the study periods I find that I can get a lot of what I think I need to get done.

Three participants argued quite strongly that homework should be done at home and not in school time. Nathan was an example of this group:
In my opinion, there’s a distinct difference between study and homework… I think homework is expected of your teachers to be done not during school time. I usually spend my study periods actually studying, but I rarely use study periods to finish my homework.

He explained his idea of the difference:

Homework is work that you’re being set to finish, and study is more rebuilding and reinforcing that information, so you can recall it at a later date, and so you can actually use it, maybe even in real life, and in your career through university, and all your further studies… Homework is more a task that will help you and lead you on the way but it won’t get you all the way there.

Ryan studied in the study period and did homework at home. Aaron was typical of those students who did homework at school: “I probably will do the homework in the study period if it’s immediately after a class I just had. I find that ’cause I’ve just learnt it, it’s easier to do the problems then, than do them later”.

Eight students saw study periods as a time to do the more ‘mechanical’ tasks because the desk space was limited, and no supporting resources were required, as Brian explained:

I guess I view study period for different tasks in such a way, because if it’s a solo task, such as straight up questions or other kind of things like that, then I’ll do it in study period, and I will find it functional or better in that way. But when it’s something that needs discussion I find at home is much better.

Gavin thought he was equally efficient at home where he had a quiet room or in study periods.

David preferred the silent study space rather than home for learning his notes, and particularly chemistry equations: “First, I read the notes in the workbook, and I memorise all the equations, and I just work ahead, so I can make efficient use of the study period”. While some participants did confirm their preference for home-based homework, others (the majority) did not. This is not consistent with the findings of Kackar, Shumow, Schmidt, and Grzetich (2011), and Leone and
Richards (1989), who found high school boys preferred to do their homework at home. One reason could be that silent study can provide a similar or even better space and appropriate conditions for homework for some. It can also limit distraction that may affect the completion of homework (as defined in its widest sense in Chapter 2 as work set by a teacher intended to be done at home). Another reason is that silent study is very rare (H. Cooper, personal communication, 27 October 2016) and the participants in the studies by Kackar, Shumow, Schmidt, and Grzetich (2011), and Leone and Richards (1989) probably did not have timetabled study periods at school as there are for silent study.

**Study periods could benefit from some flexibility**

There was little room for flexibility in silent study. However, sufficient justification emerged for some study periods to be used away from the Study Centre for Painting and Product Design for tasks that required specialist equipment or facilities, and this was arranged. An example was the time-consuming task in Product Design, of using a three-dimensional printer and laser cutter, to make a model of an article a student had designed. Henry suggested a rather novel idea for flexibility. He thought classes should be optional and study periods should be optional; but students could be required to go to one or the other and explained why:

For every class, you can choose to have a study period or to go to class because I find in class I am studying on my own anyway. I’m kind of ignoring what the teacher’s saying, doing maybe a different subject which probably I shouldn’t say out loud. So, if you had English you could go with maybe study period and then suss out your notes and then realise, oh, I actually need to ask, so you can quickly next period go to your English class instead, or something. So I think it would be more useful if I could, instead of going to, for example, chemistry, I could go to study period and study chemistry, or even then if chemistry’s a double, or it’s on the next day, and I feel that, okay, I actually don’t understand this topic, instead of doing study period I could go back to chemistry…So if you have that sort of
liberty to pick and choose, [and decide] ‘do you want to do it on your own’ or ‘do you need the teacher’s help’. I think would be very useful.

Although novel, this was very much a piece of individual thinking, which may suit an able student. However, this type of suggestion is, in part, not supported by the research of Dollinger, Matyja, and Huber (2008) who found that for high ability students, attendance (assumed at a subject class) was the factor that most improved examination performance.

For the students in this research, the desire to gain entry into a chosen University course of study was always at the back of their minds, in this their final year of schooling. This required high marks in the external examinations. A criticism by University staff often levelled at students from the school is that they are ‘spoon fed’ and their examination results are ‘inflated’ as a result. Bell et al. (2014) believe this often comes “at the price of developing independent learnings skills”. No inclusive statistics on University performance after having left school are available since the research school former CIE students are widely dispersed among New Zealand and overseas Universities. Anecdotal information from those who do report back to the school indicates they perform very well at University and have learned good self-regulation skills which may have been enhanced by silent study. Silent study may then also ‘inflate’ marks in the same way as ‘spoon-feeding’ by teachers.

Lived human relationships

A competitive environment affected students’ work output

I had not been aware of the positive effect the group could have on an individual’s motivation and/or engagement. Eight other participants described this in a similar way to Alexander: “You can actually feel the atmosphere…of people actually doing work, so you can look around and you…see their heads down and working hard. James found this motivating: “Well I find just everyone working and the silence sort of motivates you to work yourself, which in turn motivates other people; which I find quite good”. Ethan’s description was similar. “It’s like when you come into the Study
Centre…around one hundred students are all doing work and that really motivates you”. Adrian developed this concept still further:

Looking around and seeing everyone working and being productive, it kind of motivates me to be productive as well. It’s like a social effect. It’s kind of a group mentality. It’s when you see everyone around you being productive then you give it a go, and when everyone else is working then you feel like you contribute, or you feel like you should a bit. I don’t really like competition, but I get peer pressured a lot and my class is very competitive and I feel the pressure to study.

This will be discussed more fully in the next chapter. Adrian indicated this pressure to succeed from his peers was considerably greater than from his parents:

Not that much [parental pressure]. It’s more within me; I feel very pressured when other people have, say, for example, finished a whole syllabus for the year as several of my classmates have and that gives me a lot of pressure.

**Perhaps study periods could be optional**

Some students toyed with the idea of making study periods optional, as they stated was the case in all other schools attended by their Year 13 acquaintances. Peter spoke about an alternative where students timetabled for study could meet in groups of their choosing. “But I don’t think that leaving the school would be effective, but maybe being in the school as a group, that study would be maybe a little more, maybe a little less effective, than individually studying”. Aaron thought time could be wasted, if study periods operated in this way:

I know some people brought up the idea that they would rather have the period off, instead of having the study period, so that them or one their friends could get together and actually help each other with work; but most of the time that’s probably not what would happen. They’d probably just use it to go off somewhere.
If study periods were optional, the study groups would not need to be so large, and they could be split into smaller groups. If further suitable adjunct spaces were available, pairs or small groups of students could withdraw to assist each other when a student had a problem. This would be advantageous when the problem was complex (F. Kirschner et al., 2011), but not otherwise. As previous research on collaborative versus individual study demonstrated (Dhlamini & Mogari, 2013), students reported collaborative study had the most benefit in helping students struggling with complex mathematical problem-solving. As discussed above the school could consider some greater flexibility with study periods. Students should be consulted, since my research shows these Year 13 students can be trusted with making reasoned and reasonable requests, and the literature confirms this, for example, Cook-Sather (2002), McIntyre, Pedder, and Rudduck (2005) and Rudduck (2007).

**Materiality (lived things and technology)**

**Lived things and technology are valued**

Five ‘things’ that featured positively in most participants’ descriptions as adding to the material comforts of silent study were books, water cooler, air conditioning, and the arrangement of the desks and computers. These were available as and when students chose to use them. Most descriptions of these ‘things’ were very similar. The library, which included text books as well as reference material, was appreciated because it meant students did not have to bring their own text books to school. Benjamin voiced the opinion of all participants when he described chilled water from the water cooler as helpful to learning, “because you need to keep hydrated which is helpful in learning”.

All participants valued the air conditioning which was effective regardless of the season. Anthony’s response was typical: “It’s really nice and cool when you come in from a hot day and you’re running around at lunch time”. Nathan thought the air conditioning was “really helpful during the winter months”. William, like all participants saw the arrangement of the desks as conducive to effective study: “How we’re not directly next to each other where it’s spread out with a little bit more space than normal, like an exam; that helps”.
Computers were found useful

Anthony liked the availability of the computers, “They’re really, really helpful”. Most students used the computers quite extensively for completing past papers. Nathan explained why:

What I found particularly helpful this year was the ability to use computers. That was very useful for me because I learn by doing questions in past papers and so I sort of use that to help my studies. And normally before, I would do papers and questions at home, and being able to do them at school, while I go through the day, has been really useful. I think with past exam papers, for me, it helps me recall the information ’cause it trains your brain to actually get the information and put it on paper, because most people do know the content, but it’s a matter of writing it down in the exam.

Computers were useful (sometimes vital in certain subjects). The restrictions on school computers which prevented social media website being accessible were accepted, not just as being necessary to lessen distraction, but also of no real consequence to them. Students also accepted the fact that silent study involved individual learning. However, they also suggested that using social media at home was the best way to get help from their peers when there was something they did not understand. This was not possible in silent study. Students doing practical subjects like Painting, Photography, and Design spent a lot of time at the computer. So also did students doing Economics and Business Studies because many of the materials provided by their teachers were online, and because both subjects required students to be up to date with current events. Students first requested the use of personal laptops in the year of data gathering (2014). Since then there was an increasing number of requests, more as the year progressed. Any such requests were granted for Study Centre use. The school did not require or encourage students to bring their own device and a ‘bring your own device’ policy was not required. The school Learning Support Department authorised students with particular learning needs to use them in class, and also some who had obtained specialist medical approval were permitted to use them for examinations.
Summary

This chapter explained participants’ planning and learning activities. Participants reported school silent study generally had greater quality than home study and seemed more focused. They found silent study also gave them more time at home for things other than homework. They liked being able to choose what to study and how to go about it. Prior planning was uncommon, and most planning and choice of study activities was ad hoc because the need was often not established on any day, until after subject class(es). A common pattern was morning study periods spent on learning more complex material, and afternoon study periods spent on homework, although homework often had priority. Those who had more distractions at home reported they usually tried to complete homework at school.

The expectation resulting from the positive school culture that students would give of their best was perceived as a strong influence, more so than parental pressure. Participants found study periods valuable for learning, memorizing, or absorbing material, for reflexivity including reflection on tertiary study options, and particularly for anything requiring creativity and critical thinking. They reported past examination papers were useful for practice for school and external examinations and that they used these resources extensively. Participants felt ‘ownership’ of the desk they sat at for the year and liked the feeling they were widely separated from anyone who might distract them. Individual choices of what to study at school and what at home was influenced by the nature of their subjects and the required resources. Participants seemed aware that sensible choices would produce good outcomes including high academic attainment that most were striving for.

A few participants wondered if there could be greater flexibility in silent study and/or if it could be optional. In the competitive environment, participants were motivated by seeing others hard at work. They valued the provided comfort-bringing features and other resources, particularly computers. Participants understood and accepted that the absence of access to social media, while restrictive, prevented some distractions. The next chapter develops the third and last theme using the same process as this chapter.
Chapter 7 – Theme 3 – Student/student and student/supervisor relationships

This chapter interprets the third theme using the same process as in Chapter 5. As previously, this is done through the ‘lens’ of the five lifeworld existentials. The emerging findings are discussed with reference to the relevant literature. This theme explores the different and complex student/student and student/supervisor relationships that develop in silent study, compared with classroom study. The lived human relationships existential predominates for this theme. Presentation of this theme contains more of what some may regard as Year 13 boys’ flights of fancy, but these were part of their lived experience. They are discussed in Chapter 6 and here to assist in providing an answer to that part of the research questions that seeks to determine the success or otherwise of silent study. If changes suggested by some participants could enhance the success for most students, then they are worth considering. Even those suggested changes, that are unrealistic for economic or practical reasons, may still have some elements that could improve silent study. This will be developed further in the last chapter.

Lived human relationships

Silent study management was different from classroom management

Silent study was not managed like other classes. Management seemed to operate through unseen and unspoken processes that were mutually accepted by students and yet it still sometimes seemed to require some degree of control by the supervisor. It was akin to the ‘action at a distance’ attraction of a magnet for a piece of iron. Procedures were understood, established, and heeded, but did not need to be re-stated. However, management was still considered by participants as management by the supervisor. As supervisor, I very rarely spoke to the whole group except at the start of the year to set up routines, and after that, only if an issue arose that required intervention. The only regular verbal interaction was calling the roll as I moved quietly around the room. Some boys would look up and make eye contact while others were too engrossed in their work to do so. For some, this
would be the only contact they had with the me. For me, this was an essential process, as it was the only way I could get to know the students as individuals. A deputy principal stated that he considered that through this method of roll management, and other interaction I knew them better than some knew me. Although this is anecdotal information he relied on me to provide him with accurate information on students’ character traits when he asked me to do so for purposes like the award of scholarships by the school or for the award of some external scholarships. Other interpersonal communications were the smiles, and exchange of greetings at the beginning and end of the study time; individuals or groups coming to the room at other times to talk or drop off sports gear for storage; or when the supervisor met students round the school. There was little need to remind students of procedures for silent study. Every day, the study periods proceeded with no tension, no disagreements, and no misunderstandings in what could be described as an environment of mutual respect. Visitors to the Study Centre sensed the buzz of industry, like that when an examination was in progress.

**Supervisor/student relationships were different from teacher/student relationships in some ways**

Supervisor/student and student/student relationships were necessarily remote in silent study, so that students could maximise the use of the time. Students were widely separated from each other, since the room was also used for examinations, and CIE regulations specified the spacing between desks. Therefore, students could not communicate with each other. The Study Centre supervisor had to accept that the students had study periods for their own personal study and it was necessary that interruptions were kept to a minimum. It was not appropriate for him to engage in conversations with individual students during study time. This meant that interpersonal relationships which are so important in teaching were not able to be a priority. This was understood and generally accepted by the participants, as Benjamin explained: “You’re my supervisor and you’re there to help if I need anything….It’s good having someone there to make sure that you’re studying and doing what you’re meant to be doing”. Christopher saw the relationship “as beneficial to myself and the other students and that you’re putting in more effort than a lot of us”. Six other participants echoed Paul’s response:
I see you definitely as someone that is there to ensure the smoother running of study periods; and to kind of (let me think how I’m gonna phrase it) not going out of your way to do so, but definitely when it’s needed, being strict disciplinarily…this keeps me undistracted, which is very useful.

He elaborated further: “We have kind of established where we are, where we stand; we’re not testing any boundaries or anything. I think we all just want to get through our last year as easily and positively as we can”. Gavin gave a similar perspective: “If we get told something, we’re not going to mess around and push the rules; we just kind of get on with life and make sure we do whatever we can to make things happen as quickly as possible.”

Successful operation of the Study Centre was dependent on a mature level of cooperation from students. Elijah’s view of the supervisor’s role was slightly different:

I would say [the supervisor’s role is] more as having a mentor available, if need be, but generally just keeping the peace, as more of an assistant to that kind of aspect, rather than…I mean you don’t interrupt too often, so that’s good, because I find getting into a flow of study it’s good to not have too many interruptions when I’m trying to keep going and work hard. You have valuable input with regards to scholarships and how to study effectively so that’s been good.

Julian, like others, found the relationship ‘distant’ and gave reasons, although he still knew that he was ‘liked’:

I would honestly say quite distant because I am quite a way away from you as well. But I think that also has to do with the fact that we have such a big study group as well. I know that you do like me as a student and I do admire you as a master as well.

Nathan had a similar view:

I see my relationship with you as very acceptable. I think we both understand each other and we both know that if we co-operate then that’s gonna lead to a better place to study. I
really appreciate...I understand the rules you put down because there’s a reason for them and so I think that our relationship is quite understanding of each other. I haven’t really talked to you that much; so, I would like to get to know you better.

Paul had an interesting comment on the supervisor/student relationship when he suggested, “I do my work; you do your things”.

Students wanted the supervisor to manage the facility, so that they were not disturbed through inappropriate actions of others. They preferred the supervisor to stay at his desk, as any movement on his part interrupted their concentration. I became the object of their attention then, because they were not used to me doing this, and something was lost in that moment of time until I returned to my desk. Things then returned to normal immediately. Several students who needed to talk to me, for particular reasons, like asking to use a computer, did so in a whisper, because they did not want to break the silence. There was something very uplifting about looking around the room and seeing so many students so hard at work and maintaining this most of the time.

My desk was some distance away from most students and that made me remote. I did not choose to speak unnecessarily to students during silent study because that would have affected their concentration. Research confirms that even in the classroom situation teachers don’t need to be always talking, moving or intervening (Ollin, 2008), but this was much more so in silent study. Too much of this interferes with the learning process when it intrudes on the personal space of individual learners.

Comments of participants were remarkably consistent with those from Reichert and Hawley’s (2013a) relationship study of thirty-five boys’ schools worldwide. One major relevant finding of three in this research was that to get anything across to boys a teacher must establish an effective connection first. Boys would do their best for anyone to whom they could relate. The researchers gave the following advice: “Teachers who are willing to disclose and share something of themselves beyond what is required by their professional posture stand a chance of opening up a depth of feeling and productive scholastic effort from boys” (Reichert & Hawley, 2013a, p. 106). In silent study,
this could only be achieved via the frequent ‘one-minute counselling’ or ‘one-minute discussion’ before or after the session, or individuals or groups coming into the Study Centre before and after school or at other times as arranged in advance, for ‘a chat’, as three participants called it.

Reichert and Hawley’s (2013a, p. 16) advice, to “foster a school culture that understands the dynamics and the value of relational teaching” is relevant because the Headmaster and the school staff do make an effort to do this as discussed fully in Chapter 2. Effective relationships (relational teaching) in all aspects of pedagogy are important (Cohen et al., 2009), and contribute to the fundamental aim of silent study to increase academic performance in external examinations.

Despite the remoteness felt by students, they always appeared amenable, gentle, pleasant, cheerful, mature, dignified and co-operative. They were adult in their approach to everything they did in study. Their manners were impeccable, and they were extremely direct and forceful in their responses to any questions, including those I asked of participants in their interviews. In those interviews, whenever there was a suggestion that some would abuse any change to silent study, like allowing talking, students helping each other, or the use of cell phones, it was always going to be someone else and not the interviewee! This is similar to the situation where participants who proposed any change often saw it initially, as needed for their benefit alone, and not for others, as discussed in Chapter 6, and by Much et al. (2014).

**Changing the supervisor produced small changes**

Silent study operated with one supervisor looking after all classes. During my absence for any reason a relief supervisor was in charge. I had presumed silent study would be independent of the supervisor, particularly as the boys knew relief supervisors quite well. Eight participants who commented on the situation with a different supervisor in the room felt there was a difference. Some said that the difference was slight, others noticed a little more. Julian noticed “an ever so slight increase of unsettledness, I would say, when you’re not in there. But for the most part, well, for me, they’re exactly the same”. Elijah also noticed a slight effect:
There is less of that dead calm, quiet aspect because of course the other teachers aren’t quite as strict on noise or in control as you are. The mood you can tell changes, it’s kind of more conversation you can hear in the back of the room or in the computer corners, but it doesn’t greatly differ because people know what they’re there to do and what their aim is.

Four participants found the effect of a different supervisor had more than a slight effect. Paul described it as “a different feeling…It was nice, but it probably isn't the most productive in comparison”. Gavin suggested “it was just kind of like…it wasn’t as well controlled and everyone just kind of did whatever they wanted”. Oliver said that “to be honest, I think more people will talk when they come in, or maybe whisper to their neighbour, because they know that the reliever isn’t aware of how important the silence is; but otherwise I think it’s pretty similar”. Nathan gave a somewhat different description:

With a different supervisor, I think the boys tend to not take it as seriously. The level of noise does rise and it’s not as quiet as it would be. I think that’s quite a distracting thing for me. When we have relief teachers or other teachers come and supervise, the rules aren’t followed as clearly, and things tend to get a bit out of hand.

David compared this situation with other subject in-class study periods with a relief teacher supervising work set by a teacher who was absent. He suggested these are not usually productive: “Sometimes doing other subjects where the teacher’s not here, they set us work but I don’t usually get that much work done because I tend to talk with my friends”. These comments indicate that despite my observations above about the control being ‘at a distance’, it is a function of the individual supervisor who may or may not have the same view on the need for silence. Study periods may operate just as well with a different regular supervisor who allows some talking in study. Given time with an experienced practitioner, different dynamics in relationships may establish a different management style and modus operandi for study. Participant comments are based on experiencing relief supervisors for a short space of time, and while illuminating, because they highlight the fact
that some management by the supervisor is seen as operating in silent study, they should not be used
to make further judgements about the effect of a different regular supervisor.

**Lived body**

**Effect of others working was motivational**

The example of others working hard is a key benefit of silent study. Eight students spoke about how the competitive nature of the school manifests itself in silent study. Alexander’s and Peter’s thoughts are included here in full because they gave a picture of this effect in silent study. Alexander suggested:

I’d say study period makes me quite calm and it makes me feel at peace, but at the same
time I think it’s a tiny bit intimidating. I’d say it’s intimidating because there’s just rows
and rows of you and just everyone around you is studying hard and working hard and that
brings on the fact that [the school] is kind of just a big competition in terms of your exams
and stuff. Yeah, it’s intimidating in that way and I’d say it’s a little bit stressful if you think
a little bit deeper about it, that the people that are sitting in the right, left, behind you and in
front of you could be the reason that you didn’t get into a certain class or came last in a
class. I think it [competition] is kind of exaggerated or exemplified by study period because
they’re right next to you and you….might just take a little break to work and you’ll look
around and you see people working really hard and you’re just thinking to yourself, “Jesus,
these people are the people that I need to do better than”.

Peter reported that the silence was a large factor in this feeling about the atmosphere:

That atmosphere that the study period creates, it’s really, really, effective in the way that the
quietness…and even though it’s really, really, quiet you can hear the intensity of the people
around you. It reverberates around the hall and you just see everyone just not doing anything
but their work and just concentrating.
Andrew observed that the competitive spirit in the school encourages students to make full use of silent study to do the best they can: “I think it’s more that the silence is doubled with the environment of the school that encourages…”

While Adrian (in his third year at the school) said that “looking around and seeing everyone working and being productive, it kind of motivates me to be productive as well,” the pressure he felt from his peers seemed to be a little more than the competitive element experienced by other participants, because he was more afraid of failing:

I felt a lot of pressure from peers; I wasn’t quite sure what I wanted to do, so I’d worry that maybe I wouldn’t be capable of achieving what I wanted to, so felt like I had to keep up with everyone else…I think it’s more pressure than motivation, especially from peers…It’s complicated. I try to put pressure on myself but I’m kind of lacking in willpower and so when I see myself failing then I spiral into a…

He explained what he regarded as failure, and why he was afraid of failure: “Failure as in not achieving what I could have or should have”. I asked if he felt pressure from home and he replied, “My mum hasn’t been too strict on my studying”. He had been at boarding school for his first two years of secondary school.

Silent study generated mainly positive emotions. Most participants used words like exciting, peaceful, tranquil, relaxing, calming, stress-free, nice, to describe study periods. Michael suggested, “I just feel calm during study period mainly because basically you can just study”. David reported, “It’s quite calm and everyone’s silent just doing their work and motivates me to do my work”. Several students referred to their motivation, determination, freedom, and efficiency. Two students gave reasons why they looked forward to study periods. Cameron said that, “I would probably say I look forward to study period the most out of class during the day, just ’cause of getting a better understanding of…it is nice having every resource you need”. William reported, “I look forward to them because I enjoy them because it helps me understand all the work that I’m doing, more”.
As well as the competitive influences, participants reported greater motivation and thus increased productivity. Adrian said that, “Looking around and seeing everyone working and being productive, it kind of motivates me to be productive as well”. James reported, “just everyone working and the silence sort of motivates you to work yourself, which in turn motivates other people, which I find quite good” and David’s view was similar, “Everyone’s silent, just doing their work, and [this] motivates me to do my work”.

In classrooms, student/student relationships, including verbal communication, can affect productivity, for good or for bad. Half the participants stated that the biggest time-wasting activity in their learning in classrooms was talking to their friends about unrelated matters. Luke had an unusual and indeed unique response to silent study. He was the only one of thirty-five participants who felt uncomfortable in a room with a lot of people and not able to talk with them: “When there are a lot of people, I always kind of feel the need to talk; I feel kind of awkward not talking to them on purpose”. He is an able student, probably destined for highly successful tertiary study, and will face large groups of fellow-students in lecture halls and laboratories where such talking could cause problems by distracting others and affecting his own absorbing of complex material.

**The ‘Grammar Way’ affected silent study positively**

The ‘Grammar Way’ (O’Connor, 2016) was outlined in Chapter 1. The ‘Grammar way’ imposed a widely accepted and understood code of expected good behaviour which was evident in the students, almost without exception. The positive effect of the Headmaster’s promotion of the code is similar to that described by Gulsen and Gulenay (2014). Almost all students suggested the ‘Grammar Way’ influenced student motivation and engagement, seen also in silent study. They or their parents had chosen the school because of its culture, particularly regarding its values and expectations. The school is multicultural with some families emigrating from another country just to have their children educated there.

The culture of a traditional boys-only school meant that there was always a degree of formality in the way students addressed me as their supervisor, as there was with their subject teachers. Yahaya
et al. (2010) found formality was the dominant feature in school culture, and, it also affected relationships, including respect for each other. The school expectation that every student would do their best was a major factor in making silent study work. Another major factor was the effect of a competitive spirit in everything including academic performance. The school culture encouraged competition with examinations each term, rankings in all subjects, and subsequent promotions and relegations. The students indicated that this culture affected their motivation and engagement positively in silent study. Students were strongly motivated to at least maintain their position in class, and thus when they saw others hard at work in silent study this prompted them to do the same. There was a mutual recognition that we were all there for a common purpose, that of students’ advancement in learning as measured by examination performance. These positive effects of school culture are consistent with those of previous studies discussed in the literature review, for example, Wylie and Berg (2014) and Yahaya et al. (2010).

Three participants echoed the views of most of those interviewed on their acceptance and adherence to the ‘Grammar Way’ as Benjamin, for example, explained:

We’re all equal here, we’re all equal Grammar boys and it doesn’t matter where we’ve come from; we’re here now and we need to do the best we can for Grammar and so we’ll all follow the same rules, and all try and achieve our best.

Regarding the influence of the ‘Grammar Way’, Paul thought the influence became greater as students had more years at the school when he commented:

It depends if you're talking about people that have just moved here from overseas or if they’ve grown up here or been to Grammar their whole high school. I would imagine you would get more varied responses if you were to do this with third forms, where they haven't had the five years or four years of the ‘Grammar Way’ to get to the same mind-set.

Gavin suggested the conformity was widespread over all students:
I think, Grammar [boys], especially, have got relative conformity to what [the] ‘Grammar Way’ is...I mean, I feel like everyone just gets on with it the same way as anyone else, regardless of background or history.

Tristan had joined the school the previous year, and his experiences of both school and study were different because he had been home-schooled for all but the last two years of his schooling:

I was home-schooled originally for a long time and in many ways, it [silent study] is a lot like that. In a day when I was home-schooled, I guess I’d have like a three hour basically study period in the morning, where I’d do all my study, and then I’d laze around or do whatever for the rest of the day. When I came to school everything was all time-tabled, so I’d do basically whatever I was told to do, or whatever I had to do, at that specific time. I sort of lost the ability to study for myself and motivate myself and in a way, the study period has helped me, or helped me to learn to do that again.

The dynamics of group study can be different from individual study because of a variety of other influences including school culture. There is no school culture effect in home-schooling, but a positive school culture can have a positive influence on in-school study, and also on study at home for students of the school, because of the school’s expectations.

**School culture and socio-economic background affected self-regulated learning**

Self-regulated learners are successful academically, and this research has highlighted another important fact in self-regulated learning. An effective school culture promotes self-regulated learning. School-wide promotion of values and expectations can also affect the extent to which Year 13 students embrace self-regulated learning when they see others around them hard at work and realise they are in competition with them, not just in their final year at school, but also in their external examinations and thus in entry to prestigious universities. The research provided some evidence to support Steinberg’s (2014) claim that self-regulation strategies are affected by socio-economic background and home circumstances. Interview responses from those participants who had come from private preparatory schools reflected the value their parents placed on educational
success more than other participants. These values passed on by parents mirrored closely the findings of Allatt (1994). In the school, students from private preparatory schools (although not identified as such in my research) were more likely to be in the upper streamed classes. They were also more likely to be prefects (school leaders). One private preparatory school produced one quarter of the school prefects in the population for this research. The participant responses confirmed the findings of Reichert and Hawley (2009, 2010, 2013a, 2013b), of Martin (2002, 2003, 2008, 2009, 2010, 2013), and of Wylie and Berg (2014) on the positive effect of school culture in boys-only schools, particularly in engendering mutual respect.

**Study periods were not designed for collaborative learning**

Study periods were designed to be for study and not for extra help. The dilemma felt by some students when they needed to seek help, and silent study did not permit this, has been introduced previously. Just two participants thought this could be possible in the study periods. Jordan’s response, “Just maybe the option of being able to run around and ask your friend or just get them to help you understand”. Oliver suggested, “When you’re really stuck on something or a computer or a textbook can’t give you an answer, maybe the ability to have a quick word to your neighbour”. Adrian disagreed that this would be a feasible option:

> There are a lot of people in the room and if everyone asked a question every now and then it would be a really hectic place to study…When people talk, then other people start joining in, and it becomes a kind of clutter and mess.

Almost all participants (apart from the two above) decided that to allow this kind of interaction would interfere with silent study and would not work both for them and for others. Others, like Julian, suggested such assistance was unnecessary, “because I can wait till the next day to ask the teacher. But I can see why people that are a bit more fidgety, how it would frustrate them. But it doesn’t bother me too much”.

Most students did not want a change to silent study, despite recognising it was frustrating when work was not understood, and immediate help was unavailable as Cameron suggested:
I think the Study Centre, as it is now, is completely focused on studying, for making notes and your own work and I don’t think we could change that without drawing it away from what you can do for yourself. It’s good to have it kind of... where any work you do is planned by yourself and motivated by yourself, so it kind of enhances the self-reliance and independence.

William did not want any collaborative learning permitted in the Study Centre. He wanted study periods to remain silent, so that others did not distract him, “because it helps me focus on what I’m doing instead of what everyone else is doing around me and I think that helps me concentrate more instead of being distracted by others”.

**Some saw tutorials as a possible alternative**

Five participants suggested other alternatives to some silent study periods because they wanted help from teachers or peers to whom they could relate. Two participants presented the idea of teachers (who were not allocated to a class at times) providing tutorials in particular subjects. Henry thought, “Well, there could be maybe possibly [be] a rotation, so maybe one week some subjects are on a day”. Justin proposed, “It could be like tutorials running; like Wednesday study period, there’s an English tutorial, or there’s an English teacher available, so you can ask your questions rather than use that study period on your own”. Cameron disagreed because he did not want any change to silent study: “It seems again like you’re relying on the teacher”.

Adam, like two other participants, did not endorse Henry’s idea:

> It would be helpful, but the set routine we have is fine; we know it now and that is quite helpful for us to get focused really quickly, because we know what environment we’re in.

> It would be quite hard to change anything without keeping that same routine going.

Damian agreed: “Tutors would help but I don’t think that’s realistic. That would mean the study periods wouldn’t be silent. I’m pretty happy with the way it goes.”
Half of the participants endorsed Benjamin’s view: “They [study periods] are pretty helpful as they are, and I don’t see any reason to change them”. Aaron wanted the Study Centre to remain open during breaks “because sometimes you want to study during lunch”. This would mean the supervisor would also have to relinquish breaks. Alexander was opposed to the idea of study period in classrooms rather than in the Study Centre, and told me why:

The fundamental thinking for a lot of people is that teachers aren’t there to carry you all the way to the exams, they’re more there to guide you and you’ve got to do the actual learning, you’ve got to do the harder work. In that aspect, I think it’s more beneficial to you if you spend more time in the Study Centre than in normal classrooms, as long as you can achieve the efficiency, and make sure that you concentrate.

**Lived space**

**Another room for some study periods could allow collaborative learning**

The size of the room and the fact that it was also an examination centre contributed to the universal feeling that this was an area where you worked hard to achieve the best you could. However, if another room were to be made available, four participants suggested this could be used for pairs or small groups of students to collaboratively discuss aspects of their work. Strong friendships and relationships were apparent in the Year 13 cohort which made students willing to help each other even to the extent of affecting their own work. Andrew proposed it would be good to have “a room where you can just discuss; people can discuss ideas” and Ethan elaborated:

If there could be a separate room which we can go and ask the teacher, because sometimes it happens that we’re doing a question, and we have to do a topic, but you can’t do it at all because we didn’t quite get it.

Eight others, like Anthony, suggested that the comings and goings of students requiring help and leaving the Study Centre to do so would be disruptive: “It’s too big a deal to be honest”.

152
With the research school’s emphasis on extra-curricular activities many students had formed close
teacher/student relationships and found their teachers also willing to give extra subject-related help.
Three participants suggested having teachers available for such help, in a different room. Andrew
wanted this:

If I don’t understand something in a subject and I can’t work through it then I’d find myself
just twiddling my thumbs and just sitting there, for the rest of the time…so if you’re not
understanding something there could be a teacher maybe not having a class taking at that
point and could be reserved for possible help in the Study Centre.

Paul suggested the new twelve class-room building under construction, could replace the Study
Centre and the staffroom where all teachers not assigned to a class had to be always available to help
students:

If the new building was to…be turned into a merge of…the staffroom where teachers who
weren’t currently teaching a period, were; and the Study Centre where the students, who
weren’t currently in a class, were; and we could ask them [the teachers] for guidance on any
subject that we need help with then that would be awesome.

A lot of rooms and a lot of teachers would be needed to cover all subjects at both AS-Level and A2-
Level and the Board of Trustees already provided several extra teachers above Government
allocation. Teachers without classes had ‘free periods’ allocated as of right, for preparation and
marking, as per their collective employment contract. While previous research suggests advantages
in collaborative learning, for example, Laal and Ghodsi (2012), Kirschner, Paas, Kirschner, and
Janssen (2011), particularly in Mathematics (Dhlamini & Mogari, 2013; Sears & Reagin, 2013), any
variation from silent study for this purpose would need to be for a full study period and not a part-
period, so that other students were not disturbed. Mathematics was the subject most needing help
from others. However, at least three Mathematics teachers were available in prescribed rooms for
at least an hour before school every day of the school year. It is recognised that collaborative
learning is most effective in those groups where a secure relationship has already been established
accepting that “deep friendships and other relational connections are normal and central in boys’
lives” (Reichert & Hawley, 2013a, p. 227).

Lived time

Distractions from other people were limited

While “relational facility is a developable capacity” (Reichert & Hawley, 2013a, p. 192), those who
distract others can undermine good relationships. Almost all participants suggested the silent study
time was effective because other people were not easily able to distract them. Aaron said that, “It’s
not necessarily the silence; it’s the distractions, that prevent effective study elsewhere”. Tristan
suggested other people affected his study elsewhere because “In the library and your own class or at
home there’s always a friend or my mother or someone trying to say something to me and breaking
my chain of thought”. Paul found other students in the room at the same time were a positive
influence. He thought silent study “puts us in more of camaraderie with our other peers who are
also using the time, the same way as us”. Ryan explained why, “There’s nothing there that will
make you turn your head or look around the corner; it’s always just you and your work”. Justin had
a different viewpoint on distractions, indicating that the same level of distraction distracted him more
when he had not understood the work, and what he was required to do, in the tasks his teachers had
set:

If you’re really confident in that subject and you don’t really need help doing it, you can
just get on; get it done with. So, it depends for me what work I’ve got to do, and what work
I’m confident in, and what work I’m not, sort of thing. So, it changes on a day to day basis.

The positive effects of the lack of distraction are in accord with recent research (Beland & Murphy,
2015; Bembenutty, 2011c; Xu, 2010). Students wanted high examination marks, but their
friendships with their schoolmates were important, too. It was hard at seventeen years of age to find
a balance between these two opposing factors while studying at home and a strong willpower was
necessary to ensure that time was not wasted at home. Silent study did not involve such a choice,
although time could be wasted. Students were not free to decide on any alternative use of the time in silent study, but they appeared happy to have the time to do homework and other learning. While one participant suggested that this might have had the effect of students deciding that this meant they were entitled to more social media contact at home, there was no other evidence from the data to support this viewpoint. As suggested earlier, a major factor affecting homework time at home was tiredness, which may have also affected some silent study students, sometimes, particularly those fully involved in sporting activities, and particularly from early morning training.

**Distractions were from other ‘things’, not fellow students**

Interestingly, what participants saw as distractions which wasted time did not include their fellow students, who may have moved from their desk to use the water cooler, peruse the library books, or ask to use a computer, or to leave the room for any reason. They seemed to be able to ‘switch off’ when it was one of their own. However, they did react if a cell phone notification interrupted the silence, perhaps more so because the school required cell phones to be switched off in class. The other reason for their reaction was that some Year 13 boys chose loud and somewhat unusual ring tones, and these were intrusive. Any movement on the part of the supervisor did, however, gain a reaction as discussed above. This may have also been because it was quite rare. Another teacher or student coming into the room caused minor distraction, but these were part of normal school life and unavoidable. However, if a teacher visitor involved an individual student in the room in lengthy or loud conversation, participants did regard this as a major source of distraction and were frustrated by it.

**Silent study gave time for other activities helping others**

Interestingly, participants said that silent study gave them the opportunity to use freed-up other school or home time to use on other activities, like enrichment courses. This included a very popular community service option, for example, in rest homes, and in volunteer organisations like World Vision, Habitat for Humanity, Kidsline and in unpaid tutoring. The latter service was provided in the evenings to disadvantaged Māori and Polynesian students at the school’s highly successful
InZone Project residential facility. Those students who were resident in this facility would not otherwise have been eligible to attend the school, and they had been found to thrive in the school’s competitive environment (Centre for Social Impact, 2015a, 2015b) as has been discussed earlier. Year 13 students could also volunteer to tutor younger students at the school, but this happened outside school time.

**Materiality (lived things and technology)**

**On-line student/teacher collaboration was possible and useful**

Participants described a variety of ways they used computers (at school or home), or smart phones (outside school) to liaise with teachers about their subjects, or extra-curricular activities. A feature of the school was effective student relationships (Education Review Office, 2011) and both students and teachers were comfortable about such approaches. Some homework was available on-line. Anthony, for example, said that, “If I need to talk with one of my teachers, I use the computers to send an email. I get my homework on the computers if I need to”. All students had a smart phone and some sought permission to access them sometime in silent study, even though school policy was that they be switched off and kept out of sight at school. Henry explained situations where the smart phone could be useful: “I actually have all my notes written on the computer and I can access in the Cloud on my phone so it’s really easy if I can read and even going Google”.

Many teachers had resources, homework, questions to be answered, and past examination papers, on their particular subject class web-page, on the on-line collaborative learning website Piazza (https://piazza.com/). Those students, whose teachers used this facility, could seek extra help in silent study. Students could ask questions and get an immediate response from another student, or from a teacher, and in some cases, more than one teacher. A teacher could endorse a response or correct errors in student responses. Students found the discussion extremely useful in addressing gaps in their understanding. It was interesting to note that students at a computer did not appear to email another student on another computer at the same time, to seek help, although this was possible. When I asked why, I was told that it was better to use Piazza because more than one answer (from
another student and/or teacher) meant a good solution to a particular problem was more likely to be obtained.

**Student/student collaboration through computers was limited at school compared with home**

Students were not generally permitted to work together on the computer as the necessary discussion would be distracting for others. If such collaboration was considered necessary, students did work together in the Study Centre Office in the early days of silent study. That was not possible in the year of data gathering as the office had become a secure repository for external examination papers to be sat later in the year. Every participant had access to a computer or computers at home, some had their own and some more than one, which in some cases was a laptop. For many participants, this laptop or a cell-phone was their medium of contact with each other or with other people away from school. Three participants like Ethan were affected by self-imposed distractions on the computer at home while doing homework and compared this with silent study:

> At home, really, I get distracted by the computers, but in school you can’t login to *Facebook* and so that’s really helpful for me. So yeah, I can officially login on the computer and not be distracted by any other sites and just do my work.

Brian’s comparison was similar:

> I think the provision of computers, the IT facilities, are quite good because they’re restricted on the school’s systems and stuff and so that kind of allows you to be more focused and less distracted when using those. I think that is quite beneficial.

Anthony said that he felt he worked efficiently in study periods and compared this with home, where more self-imposed distractions were possible: “Most of the time at home I’m kind of half doing my homework, half on *Facebook* or something, listening to music”. Responding to possible computer distractions in silent study were rare, partly because of school-imposed restrictions. Ryan spoke
about how using the computer wisely home could then be affected by something distracting, and responding to it:

Having computers around your house and no one there watching you, or the silence, you just can get quite easily distracted and just go on it. That can be as simply as you go over and look up something on Google or something, that you don’t understand something in physics or chemistry, and then, all of a sudden, you see Facebook pop up.

Oliver gave a similar response:

As soon as I go onto my home computer to research something I always tend to drift away from why I was on the computer in the first place; I’ll end up on Facebook or something that’s not related. Whereas, on the [school] ones I just get what I need and then get on with it.

Eleven participants said that they used the school computers to print off past examination papers to study at home. They did not do this at home because they said that computers were a major source of distraction and so they turned a laptop off or moved away from a desktop computer to avoid temptation.

**Summary**

The supervisor did not usually need to directly control and manage silent study because participants generally understood and accepted the conditions for silent study established by the supervisor early in the year. There was mutual understanding and agreement that a degree of management was necessary to provide suitable conditions for study at this level. Silent study provided limited choice for the supervisor and students to get to know each other. Although participants perceived student/supervisor relationships as remote, I was regarded as a mentor or adviser. Any intrusion on participants’ personal space including by the supervisor was found to be distracting. Participants found changing the supervisor changed silent study and meant it was not always silent.
Participants found the example of others working hard motivating, while also being intimidating, because of the competitive nature of the school. However, they found the atmosphere in silent study relaxed and peaceful. The widely-promoted school values system engendered in them a desire to work hard and to perform to the best of their ability. While some students regretted that collaborative learning was not possible, they also accepted that changes would reduce the benefits they saw in silent study.

Other options to silent study were explored. Participants suggested some flexibility but wondered if optional study would be wise. Another separate room available for collaborative learning would negatively affect silent study with comings and goings unless students went there with permission for a whole period. Teachers available for individual help or providing subject tutorials in silent study would be beneficial, but teachers didn’t have extra time available. Having explored these other options for study periods, almost all participants said that they preferred the status quo. Study time in silent study was seen to be effective, because of the lack of distraction. Any distractions were usually not from other students, but from things like cell phones ringing or a visiting teacher. Participants appreciated that silent study gave them time for activities which enriched their life experiences, including taking advantage of voluntary opportunities provided by the school to help others in need.

While teacher/student collaboration through technology could be used in silent study, student/student collaboration was not. It was generally accepted that the use of other devices like smart phones was not usually permitted, except for a good reason, but the need for change was perceived and with it the need for a ‘bring your own device’ policy, at least for Year 13 silent study students. It was also recognised by participants that computers and smart phones could be a source of distraction, as they were at home, and this complicated the issues. Participants understood that the absence of access to social media at school, while restrictive, prevented some distractions. The next and last chapter presents a summary outline of the key research findings, including the essential meaning of silent study. This is followed by the research outcomes, implications, recommendations arising from the research, limitations, significance, evaluation of the results, and conclusions.
Chapter 8 – Conclusion

This chapter presents the key research findings as a phenomenological description of silent study followed by my understanding of the essential meaning of the lived experience of silent study, suggesting what is common in the experience for all participants. Outcomes are presented, including elucidation of the research questions to develop a deeper and richer understanding of silent study, and practical implications. This is followed by a discussion of how the research has added to the literature. Recommendations arising from the research, including implementation of possible changes to silent study and suggestions for future research are addressed. Limitations and the significance of the research, including an evaluation of the results, are followed by conclusions.

Key research findings

In-school silent study was a new experience for participants. Therefore, it needed an introduction, and this was done on the first day in a brief (twenty minutes at most) explanation of policies and procedures. This included showing respect for other people, punctuality, the seating plan used to facilitate the roll return, the compulsory nature of study periods, silence for study, planning, use of computers, and borrowing books from the library. The introductory session had an impact on students, and they remembered what was said. Throughout the year an individual student would often use the phrase, “Like you said on the first day”. Participants understood and liked the consistency of the Study Centre routines which ensured the smooth running of the Study Centre. Apart from the first day it was rare for the supervisor to speak to any whole group study class. There had to be a very good reason for doing so – something like the procedure for a lock-down or a fire drill. Year 13 students had many other things they might rather do rather than study, but the school had decided silent study would be compulsory, structured, and supervised, and it provided an opportunity to complete schoolwork that they might otherwise have had to do outside school hours.

The size of the room and the space between the desks made each individual feel isolated from distraction because he was at a distance from his peers. This manifested itself by the individual retreating into the private world of his own immediate study requirements, which was affected by
his mood at the time. The high ceiling added to students’ impressions that they had retreated to their little bit of personal space.

The students adapted to silent study very quickly. It was non-negotiable, with limited exceptions. For example, some subject teachers negotiated a few periods away from silent study for a few students, because extra time was needed at certain times in their course, when extra time was required to complete practical coursework requirements.

Participants said that they got more done in silent study than at home because they could focus on their work in study without distractions. Silent study was managed to minimise distraction. If there were significant distractions at home that might have made schoolwork study difficult, students would often choose to do homework at school and do study at home, because homework was checked. There were two types of distractions at home. The first type included unavoidable distractions from siblings, parents, or family activities. Some participants, particularly those involved in competitive school sports at a high level decided contact with friends was unavoidable, as they valued the maintaining of friendships. The second type of distraction included avoidable distractions using social media, particularly excessive use of cell phones with modern capabilities, music devices, television (rarely), radio, PlayStation, computers or going to get something to eat. Common distractions from computers or other electronic devices included deviation from what began as schoolwork-related Google searching, and from searching for music on YouTube. Another reason for getting less work done at home was fatigue at the end of the day, particularly for those with sports or other practices after school. Such extra-curricular activity was common by students in the research school and encouraged by parents as is typical of the values mediated and passed on by those from privileged backgrounds (Allatt, 1994).

The Study Centre was a large, useful space and the only area made available by the school for compulsory Year 13 study. It did not accommodate any ancillary spaces or adjunct rooms for collaborative work. While the unavailability of collaboration was an aspect that some would have liked changed, all students decided the comings and goings to utilise any ancillary space for
collaborative learning activities would have caused unacceptable disturbance to the quiet, peaceful atmosphere which they found conducive to effective study. Their general feeling was that using a single room was the best option.

The familiarity of one’s own desk and its position in the Study Centre were important for students. When they came into the room they went straight to their desk and immediately proceeded with their study because there was little else that they could do. To have to be silent meant the only other choices were to pretend to be working or to go to sleep. They relied on the supervisor to maintain silence. Reading could be done for subject related work from a prescribed text, or it could be done purely as a way of relaxing. Reading and getting absorbed in a text-book at one’s desk was helped by the isolation, but a more comfortable bean bag or armchair and even lying under a shady tree outside might have been preferred.

The regular situation each day with each student at his own prescribed desk, made each feel at home in a place where he was expected to be productive. Other students seemed irrelevant to what he was studying and how he was going about that, except that observing the industry of others inspired competition. A student occasionally retreated to a more confined space at the computer bench to seek information. There he felt less alone, but this may have come at a price. Others could distract him or be distracted by him. Such distractions were not particularly common but were more frequent than any other student/student distractions because the computer benches were at the far end of the room from the supervisor and the computers were adjacent to each other.

Students chose how to use the silent time. Such use varied with the time of day, with work set by subject teachers or with what had happened in classes, motivational influences, and with personal preference. Tiredness sometimes affected motivation, but generally students were on-task for the whole session. The atmosphere in the room was intense as examinations approached. The participants said that they appreciated the fact that, in silent study, some choices were taken away. They did not have to choose whether to study or not because silent study was compulsory. In other classrooms, students may have had to choose when to cut a help-seeking session with a friend or
classmate that had developed into general chatter. Participants said that sometimes their peer friendships in such exchanges interfered with their classroom learning, but no participant expressed concern about this. Even the choice of talking or otherwise during silent study did not have to be made. There was no choice to be made of how much talk, or when to talk, or for how long, or whether to have music playing.

Even though most students were involved in time-consuming and regular co-curricular activities which were regular commitments and planned well for them, the students did not usually plan ahead for silent study. The reason was that they did not always know what their school day would involve and priorities as they arose dictated how they would use their study time. It was evident that the only aspect of their work that involved any planning was to have something that could be done if nothing more urgent became apparent through the school day. Often this was a book to read, even a text-book in their schoolbag for that type of event, or a set of examination papers to attempt and then to compare one’s answers with the specimen answers. The latter were always available online. Homework required for the next day usually took precedence.

Participants did not like interruptions like people coming into the room. They wanted the supervisor to manage the facility so that actions of others did not disturb them. They also preferred the supervisor to stay at his desk, as any movement on his part interrupted their concentration. There was something very uplifting about looking around the room and seeing so many students so hard at work. The buzz of industry was palpable even in the silence. If I made the decision to get up and walk around the room, the industry was momentarily stopped, and I became the object of their attention then until I returned to my desk. Things then returned to normal immediately. Several students who needed to talk to the supervisor for a particular reason, like asking to use a computer, did so in a whisper because they did not want to break the silence. The supervisor has fewer opportunities than a classroom teacher to form a good relationship with students, yet he must manage them as a teacher does. Boys like a teacher in a room where there are high standards, clear expectations, and an atmosphere of trust and mutual respect. A successful teacher must also show he likes the students. To establish and maintain effective management the supervisor needed to like
the students and they needed to like him. Both students and supervisor needed to show mutual respect. High expectations include high career aspirations.

These notably aspirational students were generally from high income families with high academic and career aspirations. A surprising number of parents were medical, legal, or academic professionals who supported and encouraged high aspirations for their children as did the school. These are important influences in achieving sufficient marks (Allatt, 1994; Walkey et al., 2013) for selection for the specialist biomedical careers or engineering courses that many students were considering. Students considered that working hard in silent study would help them to gain entry for their chosen tertiary study. As high achieving students in a high decile school with an academic culture, they had very positive but realistic attitudes to their work, and to their likelihood of success. They were ambitious and very carefully researched and planned for their tertiary study the following year, some using some study time to do so. Some contacted friends from the previous year who were attending prestigious universities overseas as part of their information gathering. Around 70 of the 300 students were known to have applied successfully for prestigious overseas universities, including Cambridge, Oxford, King’s College London, University College London, Duke, Harvard, Brown, Massachusetts Institute of Technology, Pennsylvania, Princeton, Yale, and several Australian Universities, particularly Melbourne University.

Students liked the facilities that were provided in the Study Centre. The constant room temperature provided good conditions for learning, but it did not always prevent someone going to sleep. The water cooler assisted keeping them hydrated. Computers were available on request and necessary for some practical subjects, and for situations where subject teachers provided learning materials online. Students were not required to bring their own IT device but could if they wished. The use of laptops and personal devices, including cell phones, was rare in silent study, but it was permitted for reasons deemed good by the supervisor. An example was to scan a friend’s subject notes with a cell phone to catch up on missed work. The school did not have a school-wide management policy for personal IT device use, and they were not requested by the school, but the need for a policy for Year 13 CIE students in silent study has become more pressing in recent years. The need to permit the
use of personal laptops and perhaps cell phones will increase quite markedly from now on. One reason given by a participant was that he had more up to date software than school laptops and that was a marked advantage in two of his subjects. The research suggests that the policy would need to consider that for some students it is difficult to avoid distraction by using these devices inappropriately and whether Year 13 students in the school could be trusted to exercise proper judgement in a supervised environment like the Study Centre.

**Vignette of a typical (composite) student**

This section presents a brief vignette derived from the diverse responses of all participants to indicate how a typical student interpreted silent study:

*I was up at 5.00 am this morning for training. It was a hard session. I’ve got more training after school and won’t be home until 8.30 pm. I hope I can catch up on my work in study. I’ve got plenty to do. I like study. It’s so peaceful. It’s nice and warm. I can just get on with my work in the Study Centre. Nobody bothers me, interrupts me, or tells me what to do.*

*I’m running a bit late because I had gate duty this morning. I might need a distractor. I come into the room. “Good morning, Sir. What did you think of the jazz presentation at Assembly this morning?” I go purposefully to my desk. I know what work I need to do. I’ll fill my water bottle first because I need to keep hydrated. Then I start to write my essay. My thoughts are flowing well today. My head is bent closely over my work because I own this work. It is mine. I don’t know why I crouch over it like that, apart from the feeling that it is comfortable that way. Everyone around me is working so hard that I had better keep up the pressure. I don’t want to let myself or the school down.*

*I think the supervisor likes me because I work hard, but I need to, because I want to go to the States next year and hope to get a sporting scholarship. I do so want to achieve that because it is all I ever wanted to do. Some of my schoolwork is a bit hard to understand. I’m a bit behind, the exams are in eleven school days’ time and I’ve got fixtures right through the next two weekends. The bell is about to go, and I’ve got so much done, thank goodness. I used the full eighty minutes and didn’t*
even take a break. At least I’ve finished that essay. I really want to get a good mark for it. Now, off to training. I've got to keep my performance up to get that scholarship. “Thank you, Sir. Have a great evening”.

It is recognised that there is nothing negative in this vignette, but it reflects the fact that there was very little negativity in participant responses. This in turn is related to the boys’ high socio-economic, privileged backgrounds, the school culture, and parental choice of the school for its value systems.

**Essential meanings**

Several texts describe the phenomenological research process as an attempt to determine the ‘essence’ of a phenomenon. These include Creswell (2007), Creswell (2013), Marshall & Rossman (2011), and Moustakas (1994). In this research, the phenomenon is the Year 13 boys’ lived experience of silent study. Crotty (1996, p. 159) defines ‘essence’ as “the element or elements in the phenomenon as phenomenon that make it precisely what it is”. I do not want to use the term ‘essence’ in writing this research report. I do not believe silent study has an ‘essence’. An ‘essence’, to my way of thinking, is not a ‘thing’ to be found and seized by any researcher who should always find the same ‘thing’. I agree with the view expressed by Lindseth and Norberg (2004) where they use a different term, ‘essential meanings’. “Essences are not ideal things, given in a world of ideas, ready to be grasped in our thinking. They are essential meanings” (Lindseth & Norberg, 2004, p. 147) of being in the lifeworld, that is, experiences that are common to many participants in a particular lived experience.

I wanted to determine some ‘essential meaning’ defined in this way by interpreting silent study from the students’ descriptions. However, I was fully aware that these came from what I and the participant students had “shared in culture, history, practice and language” (Laverty, 2003, p. 26). This is consistent with Heideggerian and Gadamerian phenomenology which has informed my research. These ‘essential meanings’ are not ‘pure’ or uncontaminated ‘things’ or ‘essences’ “unsullied by the interpreter’s own normative goals or world view” (Laverty, 2003, p. 26) which
some Husserlian phenomenologists might determine some of them to be. However, even Husserl, “in relation to his understanding of the lifeworld as infinite” (Dahlberg, 2006, p. 16), distinguished between what he termed universal and open essences, and it is the latter that I feel more comfortable with, because Husserl’s ‘open essences’ equate to my use of ‘essential meanings’.

Any written interpretation presenting the essential meaning of silent study cannot be regarded as the whole meaning because meaning is infinite and changing as the lifeworld changes. It can be forever expanded and is never complete (Heidegger, 1927/2008). Incidental influences or changes affecting the lifeworld, like the construction of a new, large building, one car-length away from the Study Centre, as happened half-way through data gathering for this research, is an example of such change in the lifeworld of silent study.

My findings agree with the further stance taken by Lindseth and Norberg (2004, p. 147):

Essential meaning is something with which humans are familiar in the practices of life, and this familiarity has to be expressed through the way of living, through actions, through narratives and through reflection. For research purposes lived experience has to be fixed in texts, which then always needs interpretation. We do not believe in ‘pure’ phenomenology in which essences are seen intuitively, ‘uncontaminated’ by interpretation. Nor are we interested in ‘pure’ hermeneutics, i.e., in text interpretation that does not transcend the text meaning to reveal essential traits of our life world.

In the next section, the essential meanings of silent study are interpreted and explained. The themes based on the five lifeworld existentials are brought together into a coherent whole by discussing features of silent study which were common to many participants. “The aim of phenomenology is to transform lived experience into a textual expression of its essence” (van Manen, 1997b, p. 36). Creswell (2013, p. 79) calls this the “culminating aspect of a phenomenological study”, and suggests it be no more than a paragraph. For this research, it constitutes a summary of findings.
Essential meanings of silent study

Compulsory silent study offered students no choice of whether to attend, or whether to be silent. Collaborative learning did not happen there. Silent study provided a consistent, peaceful, pleasant environment which limited distraction, minimised time-wasting, and promoted focused, effective, productive, individual learning. In this environment students were not prone to procrastination. They got down to work immediately. The periods were not structured, and there was freedom of choice on how to use the time, within boundaries imposed by school regulations. Tasks undertaken included homework, making study notes, memorising, rote learning, studying past examination papers, creative writing, reading, and on-line research. ‘Homework’ could be done while the classroom collaborative learning was still fresh from an earlier time that day. An individual’s weaker subjects could be studied efficaciously without distraction. Isolation assisted reflection. The Study Centre was a space associated with individual learning because that was all that was ever done there. Assigned well-spaced seating created a feeling of seclusion, yet it also created a linkage effect with the other students because the rows were ordered. Students were motivated by seeing their peers hard at work. In the competitive school environment, they felt obliged to do the same. The supervisor was a remote figure, because there was necessarily limited communication, but enough for students to accept that he liked them, and they liked him. He exercised limited but still necessary management skills to maintain the silence because students largely controlled this themselves. Silent study was enjoyed, found to be beneficial, conducive to effective learning, and economical in usage of time.

Outcomes

The central research question was: “How do high-achieving Year 13 boys from a high decile school experience silent study?” The related sub-questions emanating from the central question were: “How have these boys utilized silent study?” and “What makes the silent study experience successful or otherwise for these boys?”
The answer to the first of these three questions is the substance of the essential meaning above. Silent study supported productive, individual, undisturbed, individual learning in a pleasant setting. In relation to the second question there were five aspects that affected the Year 13 boys lived experience of silent study, as with any lived experience – body, time, space, relationships, and things. Their lives were extremely busy as indicated in the Preface and the vignette above. Their silent study periods provided some time and space for them to complete their daily learning tasks, but that endeavour was also affected by relationships within the Study Centre and by material comforts that were there to assist their learning, including the heat pumps providing a constant temperature, the water cooler, computers, and books. These five aspects of the lived experience of silent study are also aspects of any lived experience. Using van Manens’s (2014) term ‘existentials’ the lived experience of silent study has been discussed in this chapter and in the previous three chapters, as has the way in which students utilised silent study. To answer the second question, these Year 13 students have used their talents, the space, the study time, and the material resources to accomplish a variety of learning tasks, positively influenced by the industry of their peers in the same room, with minimal supervisor intervention, to free up time for extra-curricular and other personally chosen activities or to progress their aspirations. Thus, the first two research questions have been addressed as the ‘how’ of silent study.

The third question was related to the success or otherwise of silent study. Students appeared active, and the participant feedback from this pedagogical practice was very positive including the fact that it was compulsory and silent. Participants enjoyed study periods, they worked hard, and while this would be hard to prove, they affirmed that it probably had a positive effect on examination results. Participants reported that it did. Some wanted a mechanism for using some of the time to get subject-related help, although they wanted this done in a way that did not cause distraction to others. They stated that they could learn from their peers and from group discussions. Some wanted more flexibility to use some study time for practically-oriented subjects. This was possible and easier to arrange because the release was granted for the whole period. Silent study may have facilitated or scaffolded self-directed learning or at least made time available for it, but it may not have facilitated
independent learning. The scaffolding disappears when students go to University and students have to learn to self-manage their learning in a more complicated learning environment all over again (A. Bell et al., 2014). I believe silent study has been useful and it was a ‘good thing’ for students, but the supervisor and the students had to accept the remoteness of the supervisor/student relationship so that there could be maximum student utilisation of the time. The answer to this last research question, addressing the ‘what’ of silent study, is that participants found silent study was a useful pedagogical practice, but it could benefit from some modifications. Modifications may or may not add to the success of silent study. Some may diminish the academic success for some students, because making choices depletes self-control (Vohs et al., 2014). However, this negative short-term impact on academic success could have the advantage of fostering greater self-regulation to enable the student to manage better at University.

Participants’ responses indicated they found it took some time to adjust to silent study. It was a new experience for them and required new planning and skills. Almost certainly all students could have benefited from an intensive, initial, taught course on how to use silent study to one’s best advantage, rather than the brief introduction mentioned above. This should include a simplified explanation of the benefits of silence for learning, utilising the findings from my research.

**Limitations**

This research concerned Year 13 boys in the specific context of a large high decile boys-only school and may not be transferable to younger students, and other schools or school types at all. Silent study was regarded as useful in the school, but such study may not suit other schools. However, the method and methodology could be used for any lived experience research. The research relied on self-reported data gained beyond the direct experience of silent study, but it was assisted by the fact that some writing by the researcher was done while silent study was in progress. A limiting factor was that participants were selected from those prepared to give up the time. The research was limited by the extent to which I could engage my own influences and biases in reflecting on the data while remaining true to participants’ lived experience descriptions. As indicated in Chapter 3 the only
criteria for the reader to judge the trustworthiness of this type of research are those suggested by van Manen (2014) of originality and soundness on the part of the researcher.

Another limitation is that the trustworthiness of this research relied on my ability to present interpretations and understandings while recognizing their contextuality and temporality, and by not asserting determinate conclusions (van Manen, 2014) about silent study. I made every effort to ensure the horizons of participants were not obscured in the fusion of horizons by remaining self-critical, as Heidegger (1927/2008, pp. 60-61) argues is necessary:

> Whenever a phenomenological concept is drawn from primordial sources, there is a possibility that it may degenerate if communicated in the form of an assertion. It gets understood in an empty way and is thus passed on, losing its indigenous character, and becoming a free-floating thesis…The difficulty of this kind of research lies in making it self-critical in a positive sense.

The research is limited by the assumptions that participants’ descriptions were candid and that I was non-selective in data sorting. Candid responses were assisted by a detailed information sheet, clear directions to potential participants, and non-selective data sorting by a systematic process as discussed in Chapter 4.

**Implications**

This research adds to the literature in several ways. Participants considered that silent study had some advantages over ‘free periods’ because there was less chance of making a wrong choice on how to use the time, when study periods were supervised, compulsory and silent. Since these students were in a high decile boys’ school and came from high socio-economic homes, they performed well academically as the literature indicated they should. They suggested silent study was an additional factor in their success. A positive school culture, including the principles of the ‘Grammar Way’, not only improved academic performance as expected, but participants said it was also a positive factor in making silent study useful and added to that improvement.
Silent study can incorporate and is compatible with a constructivist view of learning by positing that the provision of the personal space, time and facilities for learners is necessary for them to be able to construct their own knowledge using what they have gained from their teachers, peers, and others. Because the content of the Year 13 CIE courses is complex, the material cannot be absorbed without some individual and solitary input and effort. Self-regulated learners are generally relatively successful academically and this research has highlighted another important fact in self-regulated learning. School-wide promotion of values and expectations can also affect the extent to which Year 13 students embrace self-regulated learning when they see others around them hard at work and realise they are in competition with them, not just in their final year at school, but also in their external examinations and thus in entry to prestigious universities.

There are different types of silence in schools and these have been defined and discussed previously. The kind of silence in silent study is what Lees (2012) calls ‘techniqueless silence’ as opposed to ‘techniqued silence’ like meditation or whole school silent reading. My research shows the former has value, whereas Lees’s research was more concerned with the value of latter. The research also complements Lees work to the extent that I only interviewed students while she only interviewed teachers. The research has confirmed the findings of Reichert and Hawley (2009, 2010, 2013a, 2013b) and of Martin (2002, 2003, 2008, 2009, 2010, 2013) on the importance of effective relationships in boys-only schools, particularly the role of mutual respect. It has confirmed a perceived need for male students to become more autonomous in their learning. The use of devices such as cell phones may sometimes be of value in the homework setting. On the other hand, in the complex world of ever-changing technology some parental guidance may be necessary. These devices may also be of value in silent study with supervisor guidance.

The hermeneutic paradigm, the lived experience dimension, and the ways used to collect, collate, and analyse data in this research are widely transferable, particularly in meeting the requirements for teachers undergoing appraisal. Teachers are asked to curate evidence, to make sense of the evidence in collaboration with their assigned appraiser, and to then converse with their appraiser concerning the evidence which informs their practice and affects decision making (Education
Council, 2017a). The lived experience approach provides a way of looking at those things which involve human relationships and processes in other contexts in teaching and learning to provide answers to deeper questions. The link to my research is that the lived experience methodology could be beneficial if used to answer important questions in pedagogical or other practice. Some examples follow to illustrate the broader value of my approach. First, how often do we ask how well are students learning in their *experience* of a given classroom environment? We generally use academic achievement, application to work, and course evaluations by students as our measure of effectiveness. We do not ask questions about how students feel about what they are experiencing and what changes they could suggest for improving the learning experience. Second, how empowered do students feel as independent learners? Is independent learning their preference, do they prefer a more structured approach, or would they feel more empowered with the proviso for individual guidance on how to use their independence more effectively for learning? Third, how do students’ responses, feeling and dispositions to learning change over time? In the school for this research certain times of the year are busy with necessary commitment to extracurricular activities like cultural festivals, music competitions, and competitive sporting events. Do such things affect their feelings and disposition towards all learning activities including homework? The effect of other events like family disagreements or the death of a loved one may also cause change. Fourth, how inclusive are our pastoral care practices? Does this take into account the needs and perspectives of those from different cultural backgrounds? This is particularly necessary in schools like the school for this research which have a wide cultural mix of students. The pastoral care needs of Lesbian, Gay, Bisexual, Transgender, Queer, Intersex and Asexual (LGBTQIA) students can be neglected in schools. The research school responded very quickly and appropriately to the on-line testimonies of some past students who had felt this neglect (GrammarPride, 2016) and this lived experience research approach could be used to determine how students experience the effectiveness of what the school is currently doing. These four examples pertain to deeply subjective domains for which a lived experience paradigm offers students opportunities to share personal accounts to reach the essential meaning of the topic under investigation. This research has adopted and tailored the
approach to suit a particular situation, and a particular group of students, and other researchers would tailor the approach in different ways.

**Recommendations**

Since participants reported they found silent study useful it should be continued within this school setting. This research did not address fully the compulsory nature of silent study. It could be an advantage to have some adjacent seminar rooms for small groups of students to assist each other, but, as indicted by the preference of participants, this would need to be arranged for a whole class period (40 minutes), as and when requested but within limits, to avoid interruption to all the other students in that study group. If the assistance did not take much time, students would be better to continue their study in the seminar room for the rest of that period to avoid disturbing others while silent study was in progress in the Study Centre. Participant responses on their lived experience and their desire to sometimes obtain help from other students in study periods suggests that on-line group work could be made available on request if pre-arranged.

This research has focused on Year 13 boys, in the highly competitive environment of a high decile school, in a region where property prices are increasing more rapidly at the time of writing than anywhere else in the country (Quotable Value New Zealand, 2015). Further research would be needed to establish the value of silent study for girls, for students in a co-educational setting, and in lower decile schools including boys-only schools.

A considerable amount of data was collected on a comparison between silent study and study at home. Much of this was omitted from this account to maintain the focus on the central questions around silent study. The lived experience of home study may inform school study to the benefit of the latter. There is very little research comparing homework with in-school supervised study (H. Cooper, personal communication, 27 October 2016). Introducing in-school supervised study without shortening the time spent on subject lessons would mean the school day would need to be extended with a subsequent effect on extra-curricular activity as most students are involved in this before and/or after school. It would also require more supervisory staffing and thus has financial
implications. Since my research has shown the participants reported that in-school supervised study, has benefits, an extended school day for in-school study to replace homework would be a useful area to research, including a comparison with non-silent in-school supervised study for this purpose, and its usefulness for different age groups.

The literature comparing collaborative learning with individual learning shows collaborative learning has huge benefits, including higher academic achievement. Some of these benefits may not be experienced in silent study which has no included collaborative learning, except online. If silent study was replaced for some with a CIE subject with a high component of collaborative learning, the present and future benefits could be compared for two matched groups. One measurable benefit is higher academic achievement and another final degree status. A third group could be set up with a combination of the two approaches. Following the completion of this research study, the school has decided to offer the CIE subject *Global Perspectives and Research*, and hopefully a comparative research study might ensue.

Silent study is only one option for Year 13 study periods at the school. Following this current research, the school has allocated three teachers as supervisors. This provides a chance for a comparison of the effect of different management styles, including whether study periods need to be silent. Anecdotal but reliable information from colleagues and current students suggests the three supervisors do not now require silence for study. Interview data from current students would make an interesting comparison alongside the data from my research, and attempt to answer the question, “Should Year 13 study in this school be silent?” A further question is, “Do study periods in this school need to be supervised?” Even allowing one of five study classes to be un-supervised for one year, would provide the opportunity of sufficient data, although it could also perhaps disadvantage some students. It would advantage others who wanted more time for collaborative study.

**Conclusions**

This research has built on previous research on related fields, but silent study appears otherwise to have been largely under-researched (H. Cooper, personal communication, 27 October 2016).
study has utilised detailed first-hand accounts to present a phenomenological description and the essential meaning of the phenomenon. It has confirmed my view expressed in Chapter 1, that silent study is ‘a good thing’.

The students involved in silent study are those best able to provide an estimate of credibility or believability to evaluate the research. In the year of data gathering and subsequent interpretation, a group of five prefects just before they went on study leave for external examinations, suggested they would like to give some feedback on how they found silent study, to add to the research. After perusing the information sheet, and providing a signed consent form, they answered a single question, “How have you found silent study this year?” They had never seen or discussed any part of the research report. Therefore, they were able to speak purely of their own lived experience and present first-hand accounts. Although this was unexpected, they provided similar information to some of what I had written in my own interpretation. Their reporting is presented as a vignette in the Epilogue, derived from the transcript virtually unchanged, and it presents a brief picture of silent study to compare with my initial pre-research picture presented in the Preface. It seems fitting that the last word should come directly from participants in this research.
Epilogue

The lived experience of silent study for five prefects

The Study Centre was a really important tool for us. Procedures were established at the start of the year. They were made pretty clear and it was very obvious what was allowed. The supervisor made the students understand that it was important that we did focus, and we did work. We respected the environment he had set up. We all had the maturity to have understood the procedures quickly and then policed it and managed it ourselves. The supervisor didn’t have to get up and do that. That level of control came, in a big way, from the students’ ability to understand, and the supervisor’s ability to have made the students understand. It was a shared agreement where everyone wanted to do work and if everyone was quiet and everyone had that sense of control then everyone could work to the best of their own ability. People understood after being in the silent space that you could reap the benefits of it; like you didn’t want to interrupt anyone else from doing any of their work.

Silence was best for study. It was the only way to go. The silence part of it was really important, in terms of getting work done efficiently. Because it was silent, there was no distraction, you were in it with yourself and you were not talking to anyone else. It was really good to know that you had a place which you knew was going to be silent and where you could come and really knuckle down and focus on work without distractions and without people pestering you the whole time. It has been great that every day we’ve had at least forty minutes where we could nail work without being bothered. However, the ability to have had capacity for discussion was sometimes important too. We could have worked in groups and had group discussions and learned off people. It would have been good if there had another area where we could have gone sometimes and talked to people about what was going on with our subjects. We don’t think you could mix and match the two in the one room, though.

We got a lot more work done in here [the Study Centre] than we did, say, at home, because there were literally no distractions; there was nothing there, you didn’t have your phone or whatever to stop you from just sitting down and getting a good forty minutes out of work. It was a chance to do
things like homework or any extra work and a good chance to revise for exams as well. It was set up to maximise your work and it freed up a lot of time outside of school. It will have a big effect on our future.

We don’t think we would have been able to handle things this year, without having had the study period. We know it kept us up to date, our homework was completed, and we have had an extra period in the day where we could actually do work, so it’s been fantastic. It was really reassuring to have that guarantee that you’ve got forty or eighty minutes a day that you could come in and focus on your upcoming exams. We’re sure it will have a big beneficial effect on our exam results. The social aspect of things outside of school took a lot of time. So did sporting or cultural commitments and prefect jobs, all of which may have limited the amount of time to revise at home. With silent study, we could still have a break when we got home, rather than having to study. We think you couldn’t just have relied on the pressure the school put on you to succeed. To do as well as you possibly could in your exams you had to have some sort of intrinsic motivation that was your own. We’d say motivation was a huge factor for a lot of people. You had to be personally motivated to do well in your exams, to be able to designate a time to study for exams at home, and in there [the Study Centre]. It was easier to be motivated because of the work that we could get done in there. We were able to do so many other things and to have a larger variety in our lives.
Appendices

Appendix 1 Board of Trustees approval

To whom it may concern

Mr. Jack Gibbs has requested the Board of Trustees approval to proceed with research for his Doctor of Education thesis.

Mr. Gibbs has explained that his thesis is based on 'The Lived Experience of High Achieving Year 13 Boys Using Silent In-School Individual Study Time During Timetabled Study Periods'.

The Board understands this involves three group interviews with eight young men and eight individual interviews. We understand further interviews may be required. The Board approves Mr. Gibbs' access to student records for his study, but expects student details to remain confidential in his report.

Mr. Gibbs is expected to obtain informed consent from all participants and will provide the School with copies of these. It is the School's expectation that participation in this study will be voluntary.

The Board happily approves the above in support of Mr. Gibbs' thesis and looks forward to reading the research in due course.

Signed

Tina O'Connor
Headmaster

25 November 2013
Appendix 2 Method of Recruitment

With the support of the Headmaster and Board of Trustees I am undertaking a research project to find what study periods mean for you. If you are interested in giving up one or two study periods to be interviewed for this project, please pick up an information sheet as you leave the room and read it tonight. Consent forms will be available tomorrow. If you prefer, just read the information sheet and consent form online (details on the Examinations Notice Board). If you want to volunteer to take part, but don’t want others to know, just print the consent form, sign it, and return it to Mr. Gibbs, before or after school, when he is on his own in the Study Centre.
Appendix 3 Ethics approval

Dr G Burnett
College of Education
Division of Humanities
145 Union Street East

27 January 2014

Dear Dr Burnett,

I am writing to let you know that, at its recent meeting, the Ethics Committee considered your proposal entitled "The Lived Experience of High Achieving Year 13 Students Using Silent In-School study Time During Timetabled Study Periods".

As a result of that consideration, the current status of your proposal is: Approved

For your future reference, the Ethics Committee's reference code for this project is: 14/003

The comments and views expressed by the Ethics Committee concerning your proposal are as follows:

While approving the application, the Committee would be grateful if you would respond to the following:

The Committee would be grateful if you could add into the information Sheets that Mr Gibbs will be completing a reflective diary based on his observations over the course of the year.

The Committee noted that the participants will be senior students and, therefore, parental consent to participate is not necessary. If you choose to seek only the consent of students, please delete the words 'and Parents/Caregivers' from the Information Sheet. The Committee notes that it is a courtesy to inform parents about the research and the students could be encouraged to discuss participation with their parents.

Please provide the Committee with copies of the updated documents if changes have been necessary.

Approval is for up to three years from the date of this letter. If this project has not been completed within three years from the date of this letter, re-approval must be requested. If the nature, consent, location, procedures or personnel of your approved application change, please advise me in writing.

Yours sincerely,

Mr Gary Witte
Manager, Academic Committees
Tel: 478 8256
Email: gary.witte@otago.ac.nz

Cc: Professor J K Smith, Associate Dean Research, College of Education
Dr R Gasson
College of Education
Division of Humanities
145 Union Street East

Dear Dr Gasson,

I am again writing to you concerning your proposal entitled “The Lived Experience of High Achieving Year 13 Students Using Silent In-School Study Time During Timetabled Study Periods”, Ethics Committee reference number 14/003

Thank you for your email of 11 May 2017 informing me of the change of supervisors, the confirmation from the school that they have agreed to be identified and for the request for the extension of the approval which will now expire 26 January 2020.

Thank you for keeping the Committee informed.

Your proposal continues to be fully approved by the Human Ethics Committee. If the nature, consent, location, procedures or personnel of your approved application change, please advise me in writing. I hope all goes well for you with your upcoming research. Yours sincerely,

Mr Gary Witte
Manager, Academic Committees
Tel: 479 8256
Email: gary.witte@otago.ac.nz

cc. Dr K Pratt College of Education
Appendix 4 Information form for participants, parents, and caregivers

Reference Number: 14/093

28 January, 2014

The Lived Experience of High Achieving Year 13 Boys Using Silent In-School Individual Study Time During Timetabled Study Periods

INFORMATION SHEET FOR PARTICIPANTS AND PARENTS/CAREGIVERS

Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate we thank you. If you decide not to take part there will be no disadvantage to you and we thank you for considering our request. You should discuss participation with your parents/caregivers as a matter of courtesy. You will be provided with further copies of this information sheet and consent form to give to them.

What is the Aim of the Project?

Your study Supervisor Mr Gibbs wants to find out what study periods are like for you. He wants some comprehensive descriptions from a range of students. He expects to determine from these later, your perceptions of the usefulness or otherwise of silent study. This project is being undertaken as part of the requirements for Mr Gibbs's Doctor of Education degree. This research is important for the school. It has been approved by the Headmaster and the Board of Trustees.

What Type of Participants are being sought?

If you would like to be involved please let Mr Gibbs know. A selection of participants will be made to ensure a mix of ethnic groups and form class. Initially there will be 3 groups of 8 participants interviewed. This will be followed by 8 individual participant interviews. Those in the groups will not be interviewed as an individual.
What will Participants be Asked to Do?

Should you agree to take part in this project, you will be asked to:

Be part of a group interview of 8 boys, or;

Have an individual interview. At least 8 different boys will be interviewed.

Both interviews are expected to take one or two 40-minute periods of timetabled study time. You will be released from study for the interviews with Mr Gibbs.

The interview questions are not threatening and it is important you say exactly what you think.

Please be aware that you may decide not to take part in the project without any disadvantage to yourself of any kind.

What Data or Information will be Collected and What Use will be Made of it?

All interview data will be recorded and transcribed. You may view the transcript and ask for changes to be made to the transcript. This would need to be done as soon as it is transcribed. Mr Gibbs will use participant descriptions including some verbatim statements to write his report. He will also use some data about you from school records, including school reports and your student profiles. Each participant will get a printout of his own information (which is used for testimonials anyway) and you are asked to correct it if something is missing or is not correct. Further data will come from Mr Gibbs’s daily reflective diary based on his observations on study periods over the course of the year. The only people who may have access to all the data are Mr Gibbs and the Executive typist (first draft of interview transcripts only). Mr Gibbs’s Supervisors will not have access to personal data.

The data collected will be securely stored in such a way that only those mentioned above will be able to gain access to it. Personal identifying information (audio files and school record information) will be destroyed at the conclusion of the project. Raw data (interview transcripts) obtained as a result of the research will be retained for at least 5 years in secure storage.

No participant will be identified as pseudonyms will be used in the reporting and your anonymity will be preserved in the completed research. However verbatim extracts from interviews will be used. The results of the project may be published and will be available in the University of Otago Library (Dunedin, New Zealand) and in the school Library, but every attempt will be made to preserve your anonymity. You are welcome to view the completed work.
This project involves an open-questioning technique. The general line of questioning is about your experience of study periods. This includes what you do in and plan for study periods, how you feel about them, how the silence affects you and how study periods compare with home study and previous year’s study or previous school’s study periods. The precise questions which will be asked have not been determined in advance, but will depend on the way in which the interview develops. Consequently, although the University of Otago Human Ethics Committee is aware of the general areas to be explored in the interview, the Committee has not been able to review the precise questions to be used.

In the event that the line of questioning does develop in such a way that you feel hesitant or uncomfortable you are reminded of your right to decline to answer any particular question(s) and also that you may withdraw from the project at any stage without any disadvantage to yourself of any kind.

Can Participants Change their Mind and Withdraw from the Project?

You may withdraw from participation in the project at any time and without any disadvantage to yourself of any kind. This includes asking that any data you have provided be withdrawn from the project.

What if Participants have any Questions?

If you or your parents’ caregivers have any questions about the project, either now or in the future, please feel free to contact one of the people below:

**Student**  | **Supervisor**  | **Co-Supervisor**
--- | --- | ---
Mr Gibbs | Dr Greg Burnett | Dr Ruth Gasson
Study Centre | School of Education | School of Education
Auckland Grammar School | Otago University | Otago University
Tel 09 623 5402 | Tel 64 3 479 5464 | Tel 64 3 479 4040
studycentre@ags.school.nz | greg.burnett@otago.ac.nz | ruth.gasson@otago.ac.nz

This study has been approved by the University of Otago Human Ethics Committee. If you have any concerns about the ethical conduct of the research you may contact the Committee through the Human Ethics Committee Administrator (Tel 03 479 8256 or email gary.witte@otago.ac.nz). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.
Appendix 5 Consent form for participants

Reference Number: 14/068

28 January, 2014

The Lived Experience of High Achieving Year 13 Boys Using Silent In-School Individual Study Time During Timetabled Study Periods

CONSENT FORM FOR PARTICIPANTS

I have read the Information Sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage.

I know that:-

1. My participation in the project is entirely voluntary. I understand I may be part of a group interview, or have an individual interview, but not both;

2. My parents'/caregivers' consent is not required but I have been encouraged to discuss participation in this project with them as a matter of courtesy and give them their copies of the information sheet and consent form.

3. I am free to withdraw from the project at any time without any disadvantage;

4. Personal identifying information (audio files, and school record information collected for research) will be destroyed at the conclusion of the project but any raw data on which the results of the project depend will be retained in secure storage for at least five years;

5. This project involves an open-questioning technique. The general line of questioning is about my experience of study periods. The precise nature of the questions which will be asked have not been determined in advance, but will depend on the way in which the interview develops and in the event that the line of questioning develops in such a way
that I feel hesitant or uncomfortable I may decline to answer any particular question(s) and/or may withdraw from the project without any disadvantage of any kind;

6. I understand I will not be identified in the final report as pseudonyms will be used in the reporting and my anonymity will be preserved in the completed research. I realise that verbatim extracts from interviews will be used as will non-identifying extracts from school records. The results of the project may be published and will be available in the University of Otago Library (Dunedin, New Zealand) and in the school Library.

I agree to take part in this project.

....................................................................................................................  ........................................
(Signature of participant)                                              (Date)

....................................................................................................................  ........................................
(Printed Name)                                                        (Form)

This study has been approved by the University of Otago Human Ethics Committee. If you have any concerns about the ethical conduct of the research you may contact the Committee through the Human Ethics Committee Administrator (Tel 03 479 8256 or email gury.witte@otago.ac.nz). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.
References


doi:10.1016/j.entcom.2015.06.001


Eddles-Hirsch, K. (2009). *A phenomenological study of advanced learners in educational settings suited to their academic needs.* (Doctor of Philosophy thesis), University of Wollongong


198


doi:10.1080/14675980600841694


Jaensch, B. P. (2016). *What can the lit lab do for you? A qualitative analysis of high school literacy lab participants.* (Master of Arts in Reading Education dissertation), Rowan University Retrieved from http://rdw.rowan.edu/etd/569 (569)


doi:10.1080/13803611.2014.892432


