



The
University
Of
Sheffield.

Negotiating learning spaces in an FE college new build

By:

Richard Nelson

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

The University of Sheffield
Faculty of Social Science
School of Education

Submission Date: March 2020

Negotiating learning spaces in an FE college new build

Abstract

In 2015, City Green College, a Further Education College in the North of England, developed a new building designed to enable teachers to use a variety of classroom, open learning spaces and online spaces. The senior managers' aim was to alter the pedagogy to focus on independent learning. However, the teachers continued to request classrooms and avoided teaching in the newly created open learning spaces.

The aims of this research were to: 1. identify the spaces being used by the teachers in City Green College's new building, 2. examine if there is an expected change in teaching practice through the use of the new learning spaces and, 3. explore the issues raised by teachers while attempting to use the new learning spaces at the college. This case study uses Boys' (2011) spatial triad as a framework to investigate teachers' experiences as they moved from an old college building whose teaching spaces were all classrooms, to a new building containing a mix of classrooms and open learning spaces.

Three key findings emerged. First, neoliberalism influenced the design of the new learning spaces and their use by teachers. Second, performance pressures influenced teachers to seek out traditional classrooms despite other spaces being available and teachers viewed the classroom space as part of their identity. Third, without time to reflect critically on innovation in their teaching practices, teachers deferred to the classroom as their preferred space for teaching and learning.

Four key recommendations arose. First, teachers must be included in consultation regarding the design of learning spaces from an early planning stage. Second, senior managers who develop new learning spaces should communicate a strategic policy explaining how they expect the spaces to be used. Three, a programme of training is needed that encourages teachers to reflect critically on their own professional identity and relationship to teaching space. Finally, I recommend pausing the neoliberal drive for economic and performance target setting, by cancelling observations of teaching practice, in order to allow teachers to explore new learning spaces without fear of individual failure.

Table of Contents

Contents

Chapter 1: Introduction.....	7
1.1 Introduction to the study.....	7
1.2 Aims.....	8
1.3 Background.....	8
1.4 Context of the study.....	10
1.4.1 New FE college buildings.....	10
1.4.2 Teachers' anxieties.....	10
1.4.3 Expectations of the new learning spaces.....	13
1.4.5 Scope of the study.....	15
1.5 Justification for the study.....	17
1.6 Significance of the study.....	18
1.7 The theoretical framework.....	19
1.8 My positionality.....	22
1.8.2 Professional development.....	23
1.8.3 Epistemological position.....	24
1.9 Study design.....	25
1.10 Research questions.....	26
1.11 Overview of the chapters.....	27
Chapter 2: Literature Review.....	30
2.1 Introduction.....	30
2.2 The Literature Review.....	30
2.2 Space.....	32
2.3 Learning spaces.....	38
2.4 Development of college learning spaces.....	43
2.5 Use of new college learning spaces.....	47
2.6 Expectations of the learning spaces.....	49
2.7 Negotiating with learning spaces.....	51
2.8 Theoretical frameworks for studying learning spaces.....	56
2.8.1 Theoretical framework for this study.....	56
2.8.2 Critique of the theoretical framework.....	58
2.8.3 Alternative theoretical frameworks.....	59
2.9 Conclusion.....	60
Chapter 3: Methodology and Methods.....	62
3.1 Introduction.....	62
3.2 Methodology.....	62
3.2.1 Ontology and epistemology.....	63
3.2.2 The researcher's positionality.....	65
3.3 Methods.....	67
3.3.1 Observations.....	68
3.3.2 Interviews.....	77
3.3.3 Methods not chosen.....	80
3.4 Sample.....	82

3.5 Pilot	85
3.6 Analysis	87
3.7 Ethical considerations.....	92
3.7.1 Confidentiality.....	93
3.7.2 Observation anxiety.....	94
3.7.3 Participant roles at the college.....	95
3.7.4 Consent	97
3.7.5 Ethical permission.....	99
3.8 Conclusion.....	100
Chapter 4: Presentation of Findings.....	102
4.1 Introduction	102
4.2 Thematic analysis	104
4.3 Neoliberalism	109
4.4 Teachers' use of space	116
4.4.1 Use of space in the old building	117
4.4.2 Use of space in the new building.....	117
4.4.3 Balance of power in the learning spaces	119
4.4.4 Number of classrooms.....	120
4.4.5 'Mindset' change and the use of learning spaces	121
4.4.6 Teachers' use of space: Conclusion	123
4.5 Teacher training.....	124
4.5.1 Training needs.....	124
4.5.2 Implementation of teacher training.....	126
4.5.3 Teacher training: Conclusion	127
4.6 Teacher identity and use of space	129
4.6.1 Perceived autonomy.....	130
4.6.2 Teacher identity and the classroom	131
4.6.3 Students' perception of learning spaces.....	135
4.6.4 Performance management and the teacher	136
4.6.5 Teacher identity conclusion	139
4.7 Conclusion.....	140
Chapter 5: Discussion.....	143
5.1 Introduction	143
5.2 Theoretical framework - Boys' Spatial Triad	143
5.2.1 Boys' Spatial Triad in my research	143
5.2.2 Theoretical framework and the study of learning spaces.....	144
5.2.3 Critique of Boys' Spatial Triad.....	149
5.3 Learning spaces and neoliberalism	153
5.3.1 Neoliberalism.....	153
5.3.2 Neoliberalism and Further Education	154
5.3.2 Critique of Building Colleges of the Future (BCF) programme.....	156
5.4 Teachers' use of space	160
5.4.1 Use of space introduction	160
5.4.2 City Green College senior managers' vision	161
5.4.3 Teacher's use of learning spaces	163
5.4.5 Teacher's use of space conclusion	167
5.5 Training the teachers.....	169
5.5.1 Teacher training	169
5.5.2 Training in support of the new learning spaces	171

5.5.3 Training conclusion	174
5.6 Teacher identity through the use of space	176
5.6.1 Introduction.....	176
5.6.2 Teacher identity	177
5.6.3 Teacher autonomy.....	181
5.6.4 Teacher identity conclusion	183
5.7 Conclusion.....	186
Chapter 6: Conclusion	191
6.1 Introduction	191
6.2 Addressing the research questions.....	191
6.2.1 In which spaces do teaching and learning occur at City Green College's new building?	191
6.2.2 Is there an expected transformation of teaching through the use of the new learning spaces?.....	193
6.2.3 How do teachers negotiate with the new learning spaces (gaining access and using the different types of learning space) at City Green College?	195
6.3 Contribution of the theoretical framework.....	196
6.4 Strengths and limitation of the study	198
6.4.1 Strengths of the study.....	198
6.4.2 Limitation of the study.....	200
6.5 Original contribution to knowledge	204
6.6 Recommendations for policy and practice.....	207
6.7 Recommendation for future research	212
6.8 Reflections on my research journey.....	213
6.8.1 Inquiry skills.....	214
6.8.2 Writing style.....	215
6.8.3 How has my view of the world changed?.....	216
References:	221
Appendix 1 – Interview Questions for Managers\Architects	241
Appendix 2 – Interview Questions for Teachers.....	242
Appendix 3 - Ethical Review	243
Appendix 4 – Ethical Approval	248
Appendix 5 - Participant Information Sheet	249
Appendix 6 - Participant Consent Form.....	253
Appendix 7 – Archived Observation	254
Appendix 8 – Archive observation showing observer comment of room layout	257
Appendix 9 – Example of an observation from the New College Building of City Green College.....	260
Appendix 10 – Observation in the New Building solely in the open learning space	263
Appendix 11 – Thematic Analysis Coding	266
Appendix 12 – Notes on linking themes to the research questions.....	275
Appendix 13 – Theme Definitions.....	281
Appendix 14 - College Observation Form.....	282

List of Figures

Figure 1: students working in an open learning space of City Green College	12
Figure 2: use of partition panels to create a pseudo-classroom in an open learning space	13
Figure 3: the number of teachers observed using different learning spaces on offer at the new building of City Green College (n=15)	118

Chapter 1: Introduction

In this chapter, I introduce my study by outlining the aims, describing the background and context of the research, before justifying the reasons for it. The significance of my study, the theoretical framework and the positionality of the researcher are discussed, followed by an outline of the study design. The research questions are identified and the chapter ends with a summary of the subsequent chapters that structure the thesis.

1.1 Introduction to the study

This research is centred on the teachers' use of learning spaces in a new Further Education (FE) college building. The research focuses on a single case study of an FE college in northern England (pseudonym, City Green College). Within this educational organisation, the senior managers argue that they are striving to improve the student experience by making use of the learning spaces in the new building in dynamic and interesting ways (see chapter 4). The managers stated that to inspire and motivate learners, and encourage independent learning, an environment of a blend of traditional classrooms¹, new open learning spaces and virtual learning environments needed to be created. However, the concept of making use of a variety of learning spaces in teaching and learning is in conflict with the teachers' demands for more traditional classrooms for teaching. The exploration of issues around this conflict is core to this research.

¹ Whenever I use the word 'classroom' I am discussing the traditional enclosed space for one class of approximately thirty students.

1.2 Aims

The aims of this study are to:

Identify which spaces are used by the teachers in City Green College's new building.

Examine if there is an expected change in teaching practice through the use of the new learning spaces.

Explore the issues raised by teachers while attempting to use the new learning spaces at the college.

Carrying out primary research for the first aim to identify which learning spaces teachers use in the new City Green College building avoids any mistaken assumptions of which spaces are being used from second-hand accounts or timetables. The second aim examines if the management expects a change in teaching practice to occur through the use of the new learning spaces. As the teachers are not using the learning spaces as expected by the senior management at City Green College, the third aim focuses on curating issues raised by teachers when using the new learning space use to identify recommendations for future policy and practice. These aims created a focus and framework for my research and offered parameters through which current literature was selected and reviewed.

1.3 Background

City Green College is an inner city FE College in the North of England. It is amongst the largest colleges in the UK. The student body consists of 16-18 year olds studying vocational courses, apprentices spending one day of the working week at college and adults studying on Higher Education (HE) programmes. In addition, adults from external companies participate in a

range of classes focusing on their professional development or leisure courses such as foreign languages or beauty therapy. There are over 20,000 students studying at City Green College, and over 300 staff teaching and supporting them. City Green's provision is very diverse and includes learners from every level of the UK National Qualification and Credit Framework, from pre-entry to Master's level. Overall, the college has a good reputation locally and regionally, and at the time of moving into the new college building the 2012 Office of Standards in Teaching and Education (OfSTED) inspection reported that City Green College was 'good' overall, with 'outstanding features' (OfSTED, 2012).

Senior managers argued that to enable opportunities to improve teaching and learning, their vision of re-developing the original 1970s tower block to create a modern purpose-built college building was necessary. Senior managers anticipated that the new learning spaces would be innovative and inspirational (see chapter 4). City Green College's management team accessed the UK Government's 'Building Colleges of the Future' (BCF) strategy, launched in 2008, which proposed to invest over two billion pounds in renewing the FE College estate (Learning and Skills Council, 2008). However, the UK Coalition Government withdrew the programme in 2011, together with the schools' equivalent 'Building Schools for the Future', with the then Education Secretary, Michael Gove stating that the programme was 'wasteful and bureaucratic' (BBC, 2011). Many colleges had already invested heavily in designing new buildings with new learning spaces and went ahead, at least in part, to build them. City Green College was one of these. This study describes

how teachers responded to and used these new learning spaces (Aim 1). The thesis discusses the managers' expectations of changes in teachers' strategies whilst transitioning from the learning spaces in the old college building to those in the new (Aim 2). The research also examines issues raised in the new learning spaces, e.g. why teachers continued to choose to teach in classrooms rather than use the modern open learning spaces, which had been purposefully built to offer greater opportunity for independent learning (Aim 3).

1.4 Context of the study

In this section, I outline the context of my study from the perspectives of the development of new college buildings, teachers' anxieties about change in the use of new learning spaces and the expectations that the new learning spaces will alter teaching practices. I then introduce the theoretical framework underpinning the study and outline the scope of my research.

1.4.1 New FE college buildings

Besten *et al* (2011) noted that education buildings, which were developed before the BCF programme, had originally been based around classrooms and the corridors were used for the transition of learners from one classroom to the next. This had created issues such as the wasted space of small corridors, 'hidden spaces' and 'dead ends', which Besten *et al* (2011) argued promoted poor behaviour in students. Kraftl (2012) added that since the year 2000, educationalists began to demand more flexible learning spaces in which furniture could be moved to accommodate different numbers of students and

different styles of teaching. The pedagogical need for more student-centred and independent learning highlighted by Kraftl, together with increasing utility and maintenance costs, led to FE college buildings in the UK to experience a programme of redevelopment during the period 2004-2010. The college architecture changed from what Scherpereel and Bowers (2009) called 'silo classrooms', in which classrooms were created for individual groups of learners, to more open-plan, flexible learning spaces in which groups of students mingled and shared the learning experience. The open-plan learning spaces offered opportunities for student-centred and independent learning and collaboration where students could work on tasks independently or in groups without intervention from the teacher. However, as reported in chapter 5, these open-plan learning spaces raised a number of issues, which included noise, distraction, poor behaviour and a decrease in teacher self-efficacy. Within my study, the teachers continually complained that they lacked control of learning and student behaviour in open-plan learning spaces in comparison to classrooms. They also highlighted that they spent a lot of time managing behaviour rather than teaching.

The designs of FE college spaces within the BCF programme utilise modern technology, such as wireless infrastructure and mobile devices. Designs also encompass educational architecture, which embraced open transition spaces (large corridors) that are used as learning areas, furnished with comfortable chairs and containing café facilities. This results in a collection of different kinds of learning spaces for teachers to support learning.



Figure 1: students working in an open learning space of City Green College

1.4.2 Teachers' anxieties

City Green College participated in the BCF programme by demolishing the 1970s tower block of the 'old' college and constructing a completely new building containing a mixture of classrooms and open learning spaces. However, teachers complained about the lack of self-contained classrooms in this new building. To rectify this, the teachers used portable screens creating temporary classrooms in the open learning spaces.



Figure 2: use of partition panels to create a pseudo-classroom in an open learning space

Teachers stated that they needed to create these temporary spaces to enable them to ‘teach’ effectively and negotiate the best experience for their learners, seemingly contradicting the intended design of the open learning spaces. The University and College Lecturers Union (UCU) printed a newsletter in support of these concerns, outlining staff anxieties caused by the transition into new learning spaces (UCU, 2008, online).

1.4.3 Managers’ expectations of the new learning spaces

My thesis argues initially that, despite the teachers wanting to be innovative, the reason teachers continue to attempt to use classrooms is to appease the management team, who are under pressure to maximise the efficient use of the estate and resources. Later in my study, however, I identify how the pressures of performance management affect teachers by provoking fewer innovative uses of spaces and increase their demands to remain in the

classrooms despite the managers wanting teachers to use the different spaces in innovative ways. I also explore the teachers' perspectives on how they are negotiating this potential conflict to facilitate learning in a mixture of learning spaces. I argue that this conflict is similar to Hanson's (2009) findings on academic identities when the removal of choice about learning spaces from teachers at the planning stage and having spaces imposed on them by the senior management threatens academic professionalism.

The purpose of City Green's new building needs to be considered. One of the objectives of the senior managers for the new building was to create an environment in which the teachers could move away from the conventional routine of teaching in a classroom and instead make use of alternative physical and virtual spaces. City Green College management hoped that the move to a new building would follow the findings of Blackmore and Kandiko (2012), Boys and Boddington (2011) and Popkewitz (2009) by encouraging the transition of teaching practice from a didactic approach, with the teacher standing at the front of the class transmitting knowledge and skills, to a style that promoted more independent learning. By suggesting this transformation in the use of learning spaces at City Green College, the same management team is also potentially submitting to pressure to meet economic and political targets set by the UK government, by using timetabling booking systems to block book classrooms in advance of the whole academic year to measure contact time with the learners. The rooms are then booked for the entire academic year restricting the teachers' ability to be able to move between different spaces and meet the expectations of the senior managers to use the

classroom and open learning spaces in a flexible and innovative way and increase independent learning. At City Green College, teachers' contract of employment stipulates that each teacher needs to be timetabled for eight hundred and forty-four hours of 'class contact time' per year. Class contact time, in this case, is defined as teaching a group of learners or being present to facilitate their learning (City Green College Teaching and Learning Policy, 2011). The easiest way to control and monitor teacher contact time with learners is for the management to timetable the teacher into a classroom, so they are present in a particular space for a specific length of time. The management also has to grapple with finding space for over two hundred teachers who need to be timetabled in this manner. However, finding a classroom to accommodate all of the teachers, in a building with fewer classrooms than the previous one, proved difficult.

My research grew out of the discord generated by these two seemingly conflicting interests: 1. the teachers' perceived need to measure the time they spend with students, driving teachers towards using the classrooms in the new college building and, 2. the possibilities of using the open learning spaces for innovative teaching strategies. My study explores this conflict by analysing the data framed by my research aims on page 7.

1.4.4 Scope of the study

Reh *et al* (2011) noted in their study how student use of spaces outside of the classroom such as corridors, cafes and campus grounds have led to areas of college buildings being susceptible to cases of misadventure, such as bullying

or smoking. My study could have explored whether this was the case in the new building and if the new spaces facilitate or obstruct negative social practices amongst learners. However, my research focuses on how the learning spaces are used for teaching and learning activities and not learner behaviour management. I wanted to explore how teachers are making use of the new learning spaces and not how the space was designed to improve learner behaviour. Other environmental factors of learning spaces design, such as heat and light, have been shown to have an effect on learning according to Kru and LucioDorigo (2008). However, as mentioned earlier, my study focuses on the use of learning spaces by teachers and their reasons for choosing those spaces, rather than investigating alterations in physical conditions in their day-to-day routines. FE Colleges often have a social responsibility to the community around them, developing an infrastructure to support mobility and social justice (Mahony and Hextall, 2013) but this is also beyond the scope of this research.

The aims of my research are to identify the spaces being used by the teachers in City Green College's new building, to examine any changes in teaching practice through the use of the new learning spaces to meet the senior managers' expectations and to explore the issues raised by teachers while attempting to use the new learning spaces at the college. I conducted a series of observations and interviews with college staff to discover how teachers negotiate with the space in the new building. Interviews were conducted with college management to explore their expectations of a change of teaching practice (see chapter 4). Then a series of observations of teaching

in the college were conducted, followed by interviews with those staff to discuss their perceptions of the new learning spaces and how they were negotiating any transformation of their ordinary routines². Comparisons were drawn between observations of teaching in 'traditional' learning spaces in the old college building, to establish previous ordinary teaching routines and observations of teachers using the 'new' flexible spaces. This complex interweaving of data gathering, description, interpretation and analysis supports Geertz's (1973, p. 36) statement that spaces are complex, dynamic and require 'thick description'.

1.5 Justification for the study

The BCF programme aimed to update FE college buildings to better meet the needs of learners to attain high-quality skills for employment (Learning and Skills Council, 2008). This led to an architectural style that included large open learning spaces to encourage more student-centred learning and fewer classrooms (Smith, 2017). I was curious to investigate teachers' responses to the changes in learning spaces, i.e. their experiences and perspectives about the relationship between the spaces they use and their professional practice; the validity of the above claims that mixing large open learning spaces with classrooms increases the amount of independent learning. The research of JISC (2006), Bennett (2011) and Brooks (2011) focused on student perspectives of new learning spaces. This exploration of teachers' viewpoints will complement their work.

² Ordinary routines are described by Boys (2011, p.63) as 'direct-learning encounters, socio-spatial relationships and educational practices,' which could include, for example, the use of a classroom to facilitate learning and the Virtual Learning Environment (VLE) to store the material (handouts, assignments) employed in the class.

1.6 Significance of the study

The issues explored in this study are particularly significant, as my research contributes to the existing research in the FE sector, which evaluates and reflects on the impact of the new college buildings (Smith, 2017). There is also the possibility of new developments of FE college buildings, as the School and College Funding Inquiry (House of Commons, 2018) hopes that there will be an increase in FE capital spending by the UK government as outlined in their spending review (Augar, 2019).

My study is significant as it focuses on identifying spaces used by teachers in a new FE college building and the issues they raise while attempting to use new learning spaces. City Green College's teachers had developed a wide range of teaching strategies to support their learners and were committed to using the new learning spaces appropriately in a similar way to the teachers in Wilson and Randall's (2012) research. Scherff and Singer (2012) suggest that teachers crave the ability to be flexible with their teaching methods and use of learning spaces. However, my initial thinking was in line with the research of Deleuze (1992), I thought that the institutional management at City Green College still seemed to need to monitor teachers as assets. Anecdotally, I had heard from the teachers that there was still a need for management to count the number of hours teachers spend in direct contact with students. Guided Learning Hours (GLH) is a recommended amount of teaching hours in direct contact with students suggested by the qualifications authority for each course (Hughes, 2013) and the colleges often use this to balance staff workloads.

This can lead to a continuation of rigid timetables in classrooms and formalising the use of open learning spaces, by booking an area for exclusive use by a particular group of students. I initially presupposed that a paradox was created between the teachers wanting to make use of the new learning spaces and the technical management of the assets. There was a need to explore how the teachers negotiated the use of learning spaces in this environment and what lessons can be learnt. This research explores the significant issue of teachers' negotiation of different learning spaces of a new FE college building in order to inform educational institutions and policy-makers how they can support teachers to make the best use of learning spaces to facilitate student learning.

1.7 The theoretical framework

To structure and maintain focus on the discord that was taking place in City Green College, my study uses a framework created by Boys (2011) to examine any expectations of the use of space to transform practice and to investigate how the users of the space negotiate with these expectations. Boys' framework was developed from the work of Lefebvre (1991) and focuses on how space can be used to manipulate routines, and how those using the space perceive this attempt to alter routines. Boys' framework is a good fit for this research because the new learning spaces within City Green College had been designed to alter the traditional routines of classroom-based teaching. The framework helped tell the story of learning spaces through the perspectives of key stakeholders (teachers, middle managers and senior managers) in teaching and learning at the college. The framework

consists of three elements: 1. 'ordinary routines' in the learning spaces, 2. use of space to transform these ordinary routines and, 3. the negotiation of the ordinary routines and the space to transform practice. The first aspect of Boys' triad examines the ordinary routines of teachers and how they use learning spaces in day-to-day activities (Boys, 2011, p.63). These routines, described by Boys (ibid, p.63) as 'direct-learning encounters, socio-spatial relationships and educational practices,' could include, for example, the use of a classroom and the Virtual Learning Environment (VLE) to store the material (handouts, assignments) employed in the class. The second aspect is the acknowledgement of the attempts to use these learning spaces to transform these ordinary teaching activities towards another state (Boys, 2011, p.64). For example, the availability of large furnished spaces outside of the classroom allows the teacher to transform the conventional, classroom-based teaching approach to incorporate less formal independent learning in the open learning spaces. The third element of Boys' Triad examines the participants' perceptions of these ordinary conventional routines of teaching and how they negotiate with the learning spaces to attempt to transform their activities to the new expected state (Boys, 2011, p.64). This negotiation *with* the learning spaces can be seen in the way teachers create plans and resources to use physical and virtual spaces in order to support their students' engagement in the curriculum. The negotiation may also include discussions with other actors, such as managers and other teachers. Even though a myriad of studies have focused on how students use new learning spaces (JISC, 2006; Bennett, 2011; Brooks, 2011; Solvberg and Rismark, 2012) in my opinion, in the initial stages of using new learning environments, teachers need to model

how these spaces can be used before the students can explore and adapt the spaces for themselves. By using the open learning spaces for teaching and learning, the teachers model what is to be expected in these spaces and dispel students' pre-conceived ideas of what constitutes teaching and in which spaces that occurs (Long and Ehrmann, 2005).

During my analysis, the theme of neoliberalism emerges (section 4.3) and I amend the theoretical lens through which I explore the data. The structure of Boys' (2011) Spatial Triad remains the construct for my research questions. However, in section 5.7, I explain how Boys' attempt to remove what she believed to be the Marxist element of Lefebvre's (1991) Spatial Triad did not allow for me to initially consider the influence of neoliberalism. After I acknowledge neoliberalism as an emerging theme in section 4.3, the approach of my thesis alters. I no longer postulate that the conflict in the new building of City Green College is based on managers attempting to book teachers into classrooms to measure teachers' time with students and teachers' attempts to resist this to make use of all of the new spaces. My data shows that there is a range of influences that drive teachers to attempt to stay in classrooms and neoliberalism plays a large part in this. From section 4.3 onwards, I analyse and discuss my findings through the lens of Lefebvre's (1991) Spatial Triad but exploring the impact of neoliberalism rather than his Marxist perspective.

1.8 My positionality

Experience, education and upbringing affect one's beliefs and values, and values influence the way in which a researcher views the world and their approach to research. Researchers should be explicit about their values and positionality to allow the reader to evaluate the validity of the research results and balance the conclusion with those of other studies. Kelly (1989) argues that the discussion of researcher positionality potentially improves the quality of research, as readers understand that there could be possible bias or skewing of results. Carr (2000) claims that the educational researcher should have the courage to be self-aware, reflective and honest about their values to allow others to critique their work and use the data to replicate the study. In this section, I reflect on my educational background, professional development and epistemological position to help outline my values and how they have affected all the stages and decisions made in the study.

1.8.1 Educational background

As a learner, I have been a participant in what Cooper and Davies (1993) describe as the product-based, outcome-driven education system. The Education Act in 1988 introduced the National Curriculum, which focused on teachers' strategies to meet a set of predefined, standardised, mandatory objectives. The UK Government argues that the National Curriculum and assessment policy revolutionised education and helped drive up standards (DES, 1987). However, others like Cooper and Davies (1993) and Wood (2004) believe it stifled creative teaching, produced too many targets and performance indicators, and, through teaching-to-the-test, students were drilled and programmed to pass the tests at the expense of a rich and fulfilling

educational experience. Likewise, my experience of being a pupil in such a target driven curriculum gave me a negative view of education and a career in teaching was not appealing because of those constraints. Despite this, in 2003, the lure of working with young people to support them to develop their skills and knowledge in an environment designed around vocational learning encouraged me to become an FE teacher in the Post-Compulsory education sector, a sector awash with targets and performance indicators.

1.8.2 Professional development

My experience of teaching within FE, in combination with my own schooling, has given me a perspective of education from the point of view of a modernist pragmatist. Schoenbach (2012) described this as one who uses scientific knowledge to improve the environment in a structured manner while considering the practical use of theoretical ideas. I became a teacher who worked towards performance targets at the cost of developing innovative and creative teaching strategies, the success of which was difficult to measure such as, problem and team-based learning. However, my training and experience as a lecturer in education over the last six years have broadened my knowledge and understanding of a range of different learning theories which have challenged my previous thinking. While teaching trainee teachers, I have learned about and applied theories such as constructionism (Von Glaserfeld, 1995) and problem-based learning (Hmelo-Silver, 2004). I have also explored concepts such as student-centred and active learning (Kolb, 2014). The effect of exposure to the various learning environments in FE, for example, classroom, lecture theatre, workshop, VLEs and work-based learning, have allowed me to explore a wide range of learning contexts. This

experience enabled me to appreciate the design ideas in the new college building and how each space could be used to support learning. I worked as a teacher at City Green College for six years and been immersed in the transition from the old to the new learning spaces. So I have experienced first-hand the everyday issues faced by teachers during the transition. As a teacher, I used the new open learning spaces as a mix of classroom-based teaching, teaching from the front and independent learning. My curiosity as to why other teachers were not using the learning spaces in the same way and wished to teach within a classroom lies at the heart of this study.

1.8.3 Epistemological position

My background is based in the world of classical sciences (I studied Chemistry at University) and computer programming (I worked as a Software Engineer for four years). Thus, I was grounded in positivistic research, making use of statistical data to define boundaries and display results. However, I have been teaching for over fifteen years and I have developed an appreciation of the value of interpretive methodologies to make an important contribution to quantitative studies. I have seen how, seemingly 'objective', data can demonstrate the 'effectiveness' of education, yet, the stories behind the individual learners and teachers can offer illuminating insights into educational processes and support an understanding of the factors that can affect what takes place. For example, the data may show that 98% of learners have succeeded in their studies on a course after intervention was put in place, but, this figure does not tell the story of how the intervention affected the learners or how they interacted with it. In my study, it would have been possible to use numerical data to define how often learning spaces were

being used and by whom in the college, but this research required an interpretive approach to explore, in-depth, how and why the teachers negotiated the use of the new learning spaces at City Green College. The following section regarding my study design, explains how I used observations and interviews to interpret teachers' use of space and the issues they encountered while trying to use the new learning spaces at the college.

1.9 Study design

The study design consists of two methods of data collection. The first is observations of teachers teaching in the old and new learning spaces of City Green College. Data from archived observations of teaching in the previous college building was captured to identify how the learning spaces were used in the old building and act as a comparison to the teaching activities in the learning spaces in the new building. These observations were made in 2014 by members of the teacher education department and college observation team as part of teachers' continual professional development. To collect contemporary data for my first research aim of identifying the learning spaces used by teachers in the new building, I conducted a series of observations of teaching during 2016.

The second method of data collection was individual semi-structured interviews with teachers, college managers and architects. The interviews with the teachers took place after I had observed them teaching and contributed towards my first research aim to discuss their planned use of the learning spaces and any issues they found. A series of individual semi-

structured interviews with college managers and architects of the new building were held. The data collected from these interviews helped towards the second research aim of discovering if the designs of the learning spaces were an attempt to transform teaching practice.

1.10 Research questions

To help refine and define the boundaries of my research, and to meet the three aims, I developed a series of research questions based on Boys' (2011) spatial triad (see section 1.7) This allowed me to examine learning spaces from three different angles, which formed a framework for the research questions:

1. *In which spaces does teaching and learning occur at City Green College's new building?*
2. *Is there an expected transformation of teaching through the use of the new learning spaces?*
3. *What issues do teachers face when negotiating with the new learning spaces (gaining access and using the different types of learning space)?*

The first question examined the ordinary daily routines of teachers at City Green College. It was important to identify the 'ordinary routines' of a teacher at City Green College to act as a foundation to the discussions around any expected changes to these routines and how teachers were attempting to make these changes. The second question examined if there were any expectations by the senior managers of learning spaces in the new college building to transform teaching practices and alter the way in which teachers used the spaces available. The data analysed for this question helped me find

out if my belief that the managers of the college were using the learning spaces to encourage teachers to use different teaching strategies was correct. Boys (2011) believed that ordinary routines are expected to be transformed by the design of new learning spaces. The third research question asked how the teachers negotiated access to the learning spaces they wished to use. This final question was used to frame the interviews with the teachers and helped analyse issues that teachers faced when attempting to use the new learning spaces and whether the spaces promoted a change in their routines of teaching. Despite the identification in my data of the influence of neoliberalism and amending my approach to analysis through the lens of Lefebvre's (1991) Spatial Triad after section 4.3 of my thesis, the structure offered by Boys' Spatial Triad to construct my research questions remains valid. The three questions allowed me to explore and collect data on the new learning spaces at City Green College in a structured manner and examine how these spaces are being used by the teachers.

1.11 Overview of the chapters

Chapter 2 considers critically the literature on the themes of space, learning spaces, the development of college learning spaces and the teachers' and managers' expectations of new college learning spaces. The chapter continues with a review of the literature around the roles of teachers in the new learning spaces and the negotiations relating to access to the spaces the teachers feel appropriate for their learners. It concludes with an evaluation of theoretical frameworks used to research learning spaces.

Chapter 3 examines and justifies the methodologies and methods employed in this study. The justification for the sample size and use of a pilot study is discussed, along with an outline of the phases of analysis used and a discussion of ethical considerations. Steps taken during phases of the thematic analysis are explained in chapter 4, followed by a presentation of the findings. There is a change in focus on the way in which my data is presented at this point in my research. I initially created my research questions and gathered my data through the lens of Boys' spatial triad (see section 1.7), but then discovered through the analysis that three key themes influenced teachers' use of learning spaces in City Green College. From chapter four onwards, I present my findings and discussions through the three key themes of: 1. teachers' use of space, 2. teacher training and 3. teacher identity and the use of space. These themes still work towards my research aims and address the research questions, but chapter five explains how the new insight which emerged from the data forced me to question the appropriateness of my theoretical framework. The chapter introduces the influence of neoliberalism in learning space design and how teachers make use of the learning spaces and how I revisit the analysis of my data through Lefebvre's (1991) Spatial Triad. Chapter 5 ends with a discussion linking my data with the literature review and wider reading to analyse teachers' use of space, the training they received and the impact of the use of the new learning spaces on their identity.

In the final chapter, I revisit the research questions and outline the original contribution of my study. I discuss the strengths and limitations of my

research and explain the potential impact of this research to inform policy and practice relating to the use of new learning spaces. The concluding chapter also highlights further areas for research, before ending on a reflection on the study process itself.

Chapter 2: Literature Review

2.1 Introduction

This chapter critically explores the literature regarding the concept of space, the spaces in which learning occurs and City Green College managers' expectations for learning spaces to transform teaching routines. Section 2.2 is an overview of the purpose of the literature review in a research study. I visit the work of key authors who define space in section 2.3 and review the literature regarding learning spaces in section 2.4. In section 2.5, I discuss critically literature on learning spaces in colleges before focusing attention on my three research questions: 1.the spaces in which teaching and learning occur at City Green College's new building (section 2.6), 2.any expected transformation of teaching through the use of the new learning spaces (section 2.7) and, 3.the issues that teachers face when negotiating with the new learning spaces (section 2.8). The chapter concludes in section 2.9 with a critical review of theoretical frameworks appropriate to the study of learning spaces and a summary of the key debates raised in the literature which are relevant to this study in section 2.10.

2.2 The Literature Review

In general, literature reviews explore, in a critical manner, the research that surrounds a particular topic. Reviewing the research that has gone before, the researcher can identify the current position of work within the subject field and if the review is part of a dissertation, the researcher should also be able to use

the literature review to identify gaps in previous research (Wellington *et al*, 2005). Reading previous research presents an opportunity to critique the methods that have been used and help to shape the current study (Locke *et al*, 1998). With this in mind, Boote and Beile (2005) argued that literature reviews, which are part of larger dissertations, need to be thorough and comprehensive and that the review should be the foundation of the study. It is important to acknowledge the complexities of educational research and the significance of critically reading relevant literature *for* the research, therefore, being selective about what is included. For example, Maxwell (2006) was concerned that rigorous development of the literature review within tight boundaries could lead the researcher to a restricted view of the subject field and missed opportunities to widen knowledge and understanding. During my research, I used the two focused questions which Maxwell (*ibid*) suggests that the researcher should ask when carrying out the literature reviews:

1. Why this piece of literature is included in the study?
2. Would failing to discuss this literature create a gap in the research writing?

During my study, I used the Zooming Model suggested by Wellington *et al*. (2005) to act as a framework to critically explore the literature related to my research. This takes the reader through a wide view of the literature on a particular topic, before zooming into a medium and then narrow view. I started my review in section 2.3 by exploring literature discussing space, before zooming into the themes of learning spaces in 2.4 and specifically FE College learning spaces in 2.5. I then narrowed my review further by examining the study's three research questions: 1. examining the spaces in which teaching

and learning occur at City Green College's new building (section 2.6), 2. exploring *any expected transformation of teaching through the use of the new learning spaces* (section 2.7) and, 3. I discuss literature regarding the issues teachers face when negotiating with the new learning spaces (section 2.8).

2.3 Space

My first research question sought to examine the spaces in which teaching and learning occur at City Green College's new building. I begin with an examination of literature focusing on philosophical descriptions of space. I then review research studies about spaces used for learning (section 2.4).

Historically, space was seen as a physical entity that was an inflexible container for user activity (Massey, 1999). However, philosophers like Geertz (1973) and Agnew (1995) argued that space was a lot more complex than just an empty vessel. They suggested that space needed a richer definition that included the emotional attachment users had to that particular space and its context. The thoughts on the complex nature of space continued with authors such as Lefebvre (1991), Creswell (2014) and Ingold (2000). Lefebvre (1991) stated that space is not just a physical place, but also involves the interactions between the users of that space. Creswell (2014) strongly argued that space is an ever-changing place and this supported Ingold's (2000) point of view that suggested life is 'always going on' and the concept of space is fluid. He argued that spaces do not contain lives, but that lives go through, around, and to and from spaces. Ingold's concept of fluid space could have made my research difficult, as his study explains that learning could happen anywhere

and is led by all those who participate in the space, rather than the space itself. I explain below the justification of the scope of my research and that my research focuses on the teachers' perspective of the physical learning spaces of the new college building at City Green College and explores how they use them.

Ingold's (2000) research was a comparison of human and animal behaviours and concluded that humans build spaces to socialise with each other and other organisms. However, there was little insight within his work regarding those who seek solitude. This could have impacted on my research as solitude, in the form of independent learning, was part of City Green College's vision of the open learning spaces. My aim was to explore how teachers, not the students, were using the spaces within the college (explained in section 1.5). Ingold argued that the perception of possibilities guided the human development of space and not geographical space, and that personality types affect the perception of space. This can be seen in my study, not through personality types, but by the different occupational roles in City Green College. The senior managers, middle managers and teachers all had different perceptions of how spaces could be used.

In his comparison of hunters and gatherers, Ingold (2000) suggested that humans built spaces to suit their current needs and in City Green College, this was modelled by the teachers as they created classroom areas in the open learning spaces to suit their needs (see chapter 5). This viewpoint was supported by Massey (1999) who suggested that space is defined by the

perception of those who are using it and not by the tangible, physical area itself. It is this perception of space (by those using it) that can create an emotional attachment and leaves a sense of loss when it is altered. For example, if a familiar local shop is replaced by a global brand, this change can make the community feel like it has lost a part of its identity. This was a consideration in my study as the teachers moved from the familiarity of the old college building to the unfamiliar spaces in the new and using the open learning spaces due to the reduced number of classrooms. Both Massey and Ingold believed that the perceptions of space occur over a longer length of time than that of the constantly changing and fluid definitions of space suggested by Lefebvre and Creswell (2014). Creswell (ibid) argued that it is hard to get past the common sense judgment of space as a static physical object, to discuss it in more depth and that studies need to take place over a long duration to examine the different uses of the physical space. The data collected for my study took place over one year and this may not have been the longitudinal study expected by Massey and Ingold. However, my data does give an indication of how the spaces were used by the teachers, a year after they moved into the new building and this enabled a comparison of the expectations of the initial designs. The use of these spaces may continually change over time, but that is for further study.

My study aimed to examine if there is an expected change in teaching practice through the use of the new learning spaces and my second research question explores this. There is constant movement within spaces and their uses are always changing and this suggests that spaces are open voids to be

filled at a specific time and, therefore, their perceived definition is constantly altering (Creswell, 2014). Defined areas for learning existed in City Green College's new building and all of the teachers used these areas to teach classes (see chapter 4). However, Massey's (1999) study concentrated on spaces being defined over a set period and suggests that the users of space have a preconceived perception of what this space is, and how it can be used. Soja (1996) supported this viewpoint by suggesting that the participants of space will decide what space is used for. He came to this conclusion by looking at space on three different levels. His first level of space was termed 'Firstspace', which is the defined need for that space. 'Secondspace' is what that space is designed to achieve and 'Thirdspace' is how space is actually used by those who experience it. Like Lefebvre, on which Soja's (1996) work is based, Soja discusses western urban spaces and sees space as a product and a potential driver for political or economic change. However, his research lacked exploration of the feelings and emotions regarding space, which could prevent a correlation between the change targeted by the design and the actual use by the users. For example, Soja's (1996) discussion on the plazas and parks of 'Citadel-LA' is focused on economics and not the emotional relationships with space amongst a cityscape. In answer to my third research question, Soja's work suggests that the teachers of City Green College are likely to negotiate the use of the most appropriate space for their learners at a local level despite the guidance given in any policy document. Also, the emotional identity of a teacher through the association to classroom space emerges in my discussions in chapter 5.

Like Soja, Harvey (2005) adapted Lefebvre's work in his research into users' perception of space. However, he disputes Lefebvre's idea that space is produced by society. Instead, he suggests that the individual users create conceptions of space. In his work, Harvey flits between ideas of space being abstract or physical. This makes his conclusions inconsistent as within the same text, he focuses on the issues of space relating to the physical area and at other times he focuses on the users' perception of the spaces they inhabit. Harvey's argument that individual users create a concept of space is supported by Massey (1999) who stated that space is constructed socially and is continually under construction. This is because space and time are entwined in what Massey states are a complex 3D context and that the physical void labelled as space, can only be named by those who are using it. Harvey and Massey's articles would suggest that any attempt by the senior managers of City Green College to dictate the definition of space would be rejected by the users (the teachers) who will construct their own definitions. My second research question explores if the senior managers at City Green College believe that the physical appearance of the different spaces in the new building should indicate how they are to be used.

Unwin (2000) argued against the work of Lefebvre and others, suggesting that focusing research on socially constructed space ignores the considerations of physical space. He critiqued the work of Lefebvre (1991) and Soja (1996) by stating, in their studies, that they explore the modern urban environments and do not consider rural life or communities outside of Western Europe. Unwin (*ibid*) suggests that we need to acknowledge the context of the work and from

which political viewpoint the author is defining space. He suggests that Lefebvre comes from a Marxist point of view and lacks humanity (feelings and emotions), and he goes on to state that language used by Lefebvre (1991) is not defined and can be interpreted in different ways. Acknowledging Unwin's (2000) concerns, in answer to my third research question in chapter 5, I explore both the influence of political ideology and the context of the teacher's emotional attachment (Agnew, 1995) in their choice of learning spaces.

My investigation into how teachers negotiate with the different learning spaces in the new building of City Green College follows Deleuze's (1992) focus on users moving from one contained space to another. Even though the users individually perceive space from their own viewpoint and feel that they can move between these spaces freely, Deleuze asserted that this is not in fact freedom. Users of space find themselves being contained and enclosed in a space defined for a particular use and any movement is from one enclosure to another. Deleuze offers hope in escaping this false freedom by users confronting those in control and protesting through their own use of the space. My study aims to explore the issues raised by teachers while attempting to use the new learning spaces at the college and I examine the roles of the management team who control the learning spaces.

For this study, I consider space as a combination of a selection of the philosophies mentioned above. Spaces in City Green College are observed within a particular time period, as described by Deleuze (1992) and Massey (1994). In City Green College, the learning spaces are a blend of physical or

virtual spaces in which the social interactions are based around the theme of teaching and learning. Using the social interaction of teaching and learning allows the use of any container, online or otherwise, to be used as a space in the context of this study. A comparison of this early definition of space with current learning spaces will be explored in the next section.

2.3 Learning Spaces

There are many descriptions of learning spaces and these places are not easy to define. Geertz (1973) suggested that space is a complex 'thick description' of the context in which the space is used and the human behaviour that is meaningful to those outside of the space. Human interaction within space is a cultural and social experience (Gibson, 1977). Therefore, taking this into consideration it is difficult to arrive at a consensus of what makes a good or bad learning environment. The philosophers discussed in the previous section (2.3) differ in opinion regarding how people perceive and use space, and there are indications from the data collected for my first research question that could demonstrate that teachers and students perceive space differently from its intended design. However, to alleviate Geertz's (*ibid*) worries about space being complex, I need to support my research by defining the spaces within City Green College.

No matter which ideology is utilised by the architects to design new educational buildings, or what individual design embellishment they add, they generally create four physical spaces (JISC, 2006; Everett, 2008). The first space is the traditional *classroom*, a four-walled space with a teaching area

and a space for students to sit. The second learning space, the traditional narrow corridors between the classrooms have been replaced with wide and expansive areas, providing space to transit between different spaces and furnished in a way to allow students to sit and work individually or in groups. These new corridors have been called *open learning spaces*. The third learning spaces are the *service areas* such as, the canteen, cafes and coffee bars, which create other spaces in which students can socialise and discuss their learning experience. Finally, the school or college design includes an *outside space*, which incorporates all areas outside of the college building up to the boundary of the campus. This study will use the above definitions for the physical learning spaces in City Green's new college building to address my three research questions: 1. identifying the spaces being used by the teachers in City Green College's new building, 2. examining if there is an expected change in teaching practice through the use of the new learning spaces and, 3. exploring the issues raised by teachers while attempting to use the new learning spaces at the college.

The senior managers of City Green College explained how they expected the new learning spaces to be used as a mix of classroom teaching and independent learning in the open learning spaces (see chapter 4). The concept of independent learning, vocalised by the senior managers demonstrated the holistic, self-directed, learning theories suggested by Knowles (1975), and Rogers and Freiberg (1993). This ideology supports the concept of andragogy (Connor, 2004), in which the learning is directed by the learner or huetagogy (Halsall, 2016), in which the learner is completely self-

directed. However, rather than allowing the learner to be completely self-directed, Jung and Latchem (2011) stated that teaching spaces are areas in which the teacher patrols and this refers more towards the pedagogical theory suggested by Hirsch (2007) in which the teacher directs and supports the learning as a means to transmit knowledge. Cockburn (2005) in particular noted that learning needs to be supported by a teacher, at least initially.

The first research question in my study attempts to examine which spaces teachers use and I do this by observing the spaces chosen by the teachers to orchestrate learning. Cockburn's (2005) study of classroom observations demonstrates that even though more independent learning had been planned, teachers like to keep some control and do this by retaining a defined teaching space. According to the data in Cockburn's research, this is usually the front of the classroom. Even though Cockburn's research is based on interviews with observers, as opposed to actual observations and the sample size of interviews is not declared, the influence of Cockburn's study is why I focus on the teacher's perspective of space rather than the learner. The teacher has to guide and support the learners in the use of the new learning spaces of City Green College before they can find uses of the spaces for themselves.

Learning spaces can be seen as areas within a building defined by an organisation (Wilson & Randall, 2012; Thomas, 2010) and I explore this in my second research question, which aims to find out if the senior managers are trying to use space to alter teaching practice. The focus of my research is on the three learning spaces termed the classroom, open and online learning

spaces. Even though the senior managers have responsibility for the whole campus, Bennett (2011) argued that it is hard to demonstrate that the whole campus is a learning space. He goes on to state that gathering data from across organisations to make a judgment about which spaces are appropriate for learning has proven difficult. In his research, the learners at each participating campus offered a variety of results. This is particularly apparent when offering a critique of Bennett's (*ibid*) study, as a number of variables were not addressed. For example, it is not evident that there had been any teacher guidance on which spaces could be used for learning and what level of access was available to resources such as WIFI. In conclusion, Bennett offered a basic statement that some spaces can be used for some learning, but nothing can be defined. In defence of Bennett's research, it seemed that those with a vested interest in each learning space were trying to justify their own existence on campus. For example, the library and café staff were very explicit in that their areas should be defined as learning spaces.

For my study, the term 'learning space' refers to any physical, or virtual space, which is occupied by the teacher for the purpose of learning. My study will use the term 'learning space', and the teacher is an actor in this space. My research is less about the activities themselves and more about the spaces in which the activities are actually taking place. The aim of my study is to explore which spaces the teachers use from a selection of classrooms, open learning spaces and virtual spaces. These options should allow teachers to escape the reliance on using a classroom for learning and enabled them to explore the possibility of different pedagogies in other spaces. This use of learning spaces

by teachers to liberate teaching and learning links to Milovanovic's (1995) suggestion that concepts of post-modernism include diversity, change, dissipative structures and orderly disorder. However, we must be aware that teaching cannot be completely liberal and free, as there are clearly defined goals in teaching and there needs to be some structure. The structure of teaching and learning, provided by organisational policy and strategy, allows teachers to innovate using research-based methods and not be consumed by the 'messy business of the normal teaching process' (Laurillard, 2012, p. 6).

The notion of retaining some control of the learning environment is apparent when you consider that teachers are only one of the stakeholders involved in the planning of where learning is to take place. Educational managers also have an investment in which learning spaces are used, as they have economic and performance targets to meet. Deleuze (1992) added that schools have moved away from the closed controlled environments described by Foucault (1977) and are now part of a system in which market forces determine the focus of the product. Even though Foucault states that these market forces are not interested in the process of learning to create the type of student they require, the FE market in the UK is controlled by the tools of money, profit, and efficiency, and led by students choosing where they want to learn (Steer *et al*, 2007). This forces the organisations to encourage teachers to be more dynamic, engaging and student-centred in their approach to improve the institution's reputation in the market, while still needing to meet profit forecasts and resource budgets. A paradox is then created between post-modernist teachers wanting to make innovative and creative flexible use

of the new learning spaces and a modernist style of management of the assets; a conflict that is seen in City Green College, which prompted my study. The need to audit the use of resources constrains the concept of teachers being given the freedom to facilitate learning in various spaces. My study highlights that there is a need to explore how the teachers are negotiating the use of learning spaces in the constraints of the economic environment and what recommendations to improve policy and practice can be made.

2.4 Development of college learning spaces

Further Education was not considered distinct from the school system or given any priority in the education sector, until the 1944 Education Act, which commissioned the building of adult education institutions and technical colleges (Lucas, 2005). Before this time, education beyond school was the domain of workplace apprenticeships or charitable institutions. The 1944 Education Act stemmed from the UK Government's priority for a skilled workforce to rebuild the country's infrastructure after the Second World War and to support troops returning from the conflict who needed support to retrain for civilian life. The control of the adult education institutions and technical colleges was passed to the Local Education Authorities (LEA) to ensure that the skills developed at these colleges supported the local employers' needs. By 1947, the number of FE institutions had doubled to six-hundred and eighty (Simmons, 2014).

The importance of FE continued as the Crowther Report, in 1959, identified the sector as critical for generating economic growth (CACE, 1959). However, Tipton (1973) explains that during the 1960s and 1970s the role of technical colleges as a hub for work-based learning declined and as a result, the colleges began to transform into colleges of general further education. They offered a wider range of academic and vocational courses, and Spours and Lucas (1999) noted that there was an increase in student numbers from the late 70s into the 80s as colleges enrolled more 16-19-year-olds into full-time education. This increase in young people attending FE College was symptomatic of an increase in youth unemployment, pressure from parents for young people to gain further qualifications rather than be without work and the widening skills gap between the school curriculum and the need of employers (Avis, 1985).

The government placed LEAs under pressure to meet and publicise academic and economic neoliberal targets that increased competition between FE institutions and developed market forces in the sector as students had the option to choose the college that best suited their needs (Simmons, 2014). It was during this growth in student numbers, during the 1970s, and the increased need for general classrooms for full-time learners rather than vocational workshops for day-release apprentices that influenced the development of the campus of City Green College. The urban area surrounding City Green College had a particular issue with youth unemployment that continues to this day (Kalia, 2018). The college estate was increased with the building of the main college tower block I, and the

participants in Chapter 4, term the 'old building' in this study. The marketization of FE, driven by neoliberal ideologies of the UK government continued through the 80s and 90s via the development of the Education Act 1992. Within this act, college managers became accountable for budgets, student success statistics and institutional marketing information, all to allow consumers (the students) to make informed comparisons (Smith and O'Leary, 2013).

The Building Colleges for the Future (BCF) and the associated Building Schools for the Future (BSF) programmes were a coherent vision developed in 2007 between schools and FE colleges that looked to transform the pedagogical relations between the two by developing new learning environments. Avis (2009) explained that the UK government hoped that by re-designing the learning spaces there would be a transformation in learning. A large proportion of the FE college student body is made up of 16-18 year olds (OfSTED, 2012) and therefore there does seem to be a natural link between objectives of the BCF and BSF programmes, as both programmes were designed to develop the estate used by young learners to raise aspiration and provide spaces in which learning can be flexible and student-centred. Avis (2009) explained that this transformation of learning space has not been easy, as colleges find themselves caught between schools and Higher Education. They are subject to policy decisions made for their under-18 provision by the (then called) Department of Children, Schools and Families, and for their adult courses, by the Department of Business, Innovation and Skills. This impacts on the teachers' use of space in an FE

College and could influence the data collected for my first research question, as the teachers try to support teaching and learning of secondary school-aged students in an environment designed for mature learners.

Boys and Boddington (2011) stated that learning spaces in FE Colleges are not just defined by the design, they are also represented by the relationships between the place and the learning strategies. Teachers and learners often perceive learning spaces to have an associated teaching method (Thomas, 2010). For example, lectures in a lecture theatre and science experiments in a lab. Any attempt to use new designs of learning spaces, such as moving collaborative learning into an online environment without supporting the users to alter their beliefs, could fail to make any desired change due to this association. The association of methods with space could also reduce the effect of new FE learning environments being used to encourage teachers to take learning beyond the classroom (Madigan and Sirum, 2006). My second research question explores the expectations of the senior managers and their hope that, as experienced by Neary and Winn (2008), the teachers of City Green College could see past this association of particular methods with physical or virtual spaces. Thus, enabling the potential to create an effective learning environment in which holistic self-initiated independent learning is developed.

When considering my third research question, the teaching staff at City Green College also had to deal with the integration of new technology within the learning spaces. A study by JISC (2006) showed that where technology is

enabled, there is an expectation of its integration and inclusion amongst learners. In Riddle and Arnold's (2008) study, they removed technology from students for a week, before reintegrating each item one at a time. It was discovered that the students reported that mobile devices and the Internet were vital for all of their studies. It is important to note that this research was carried out in an environment in which the technology was already prolific and being used effectively by teachers. Perhaps new learning environments in which technology is a recent addition, like City Green College, and not been used routinely by teachers in the past, would yield different results. The new learning spaces at City Green College had an integrated wireless infrastructure that allowed learning to continue in any of the spaces and these should have supported the transition of learning from one space to the next. However, in my study, the technology proved to be an issue in the teachers' negotiations with each other, and the managers, regarding which spaces they wanted to teach within (see chapter 5).

2.5 Use of new college learning spaces

In their study, Clarke *et al* (2002) explored the complex interactions between the learning spaces from a teacher's point of view. Their research showed that the users of the spaces within colleges followed the signs that clearly identified the boundaries between the different places. It also showed that spaces of structure and discipline were the lecturers' most desirable places to work i.e. a classroom. In a similar vein, my study explores the teachers' views of different spaces and goes further in trying to identify why they chose that

particular space for learning activities when they had a range of other spaces to choose from.

Clarke *et al* (2002) argued that flexible learning environments are important and allow teachers to use and arrange spaces to suit their learners but they offered little reference to data that demonstrated the effectiveness of this flexibility of learning. However, physical or online learning spaces that are too abstract in design could confuse the users, teachers and learners, as learning spaces represent the college's strategy for learning (Thomas, 2010).

Therefore, colour schemes, lighting and technology integration are key factors to communicate this vision to the users and there is a relationship between the space and the learning itself (Boys and Boddington, 2011). In addition to the consideration of the physical spaces, there is also an expectation by the students that the learning environment is integrated with technology and the physical learning spaces blend with the virtual spaces. Peach *et al* (2013) found that students wanted the VLE to act as the main communication tool and present information to them. They also found that staff using the VLE improved their social connections with students and the rest of the teachers in their team.

The observation by Kraftl (2012) that suggested aspects of new architecture design of learning spaces are used to alleviate behavioural problems caused by hidden or dark spaces is out of the scope of my research. My study is looking into ordinary routines in learning spaces within an FE college and is concentrating on the core teaching and learning aspects. Kraftl (*ibid*) showed

how organisations were using space to control behaviour, however, Deleuze and Guattari (1998) argued that space is not a series of enclosures but an overlap of modern and post-modern spaces. They state that space can be both disciplined containers and liberally self-managed at the same time. It would seem from this viewpoint that corporations expect learning spaces to transform practice, gather resources, and allow learners to self-manage. The mixed need for discipline and independent learning opportunities caused issues and in chapter 5 I discuss those issues raised by the participating teachers in my study.

2.6 Expectations of the learning spaces

Through interviews with the management of City Green College, my study explores Avis's (2009) statement that by re-designing the learning spaces there would be an expectation of transformation in learning. City Green College's senior management was following the current trend in education to use student-centred independent learning theory (Educational Excellence Everywhere, 2016) and the call for post-school education and training to make use of flexible learning and assessment methods. Spaces in colleges are developed to support this and to help to develop independent learning and flexible skills for the workplace (Thomas, 2010).

Thomas (2010) suggested that space is defined by the teachers and learners through the teaching methods in which they participate. It could, therefore, be argued that the teaching methods may change, but the space does not; it is

the teacher defining the teaching and learning strategies that give the physical or virtual spaces an identity. However, there is a need for specialist input within the learning spaces to engage in learning and the teacher offers inspiration to the students to enable them to see how they can use the spaces for themselves (Boys and Boddington, 2011, p.77). Scollon and Scollon's (2003) discussion regarding associated memories of school or teaching experience attaching teachers to classroom-based methods would seem to support this argument. However, Thomas (2010) goes on to state that a college's learning spaces represent a visualisation of the institution's vision and strategy for learning. It is likely that the college management will need to maintain some control over these learning spaces to create a consistent stakeholder perception of the college environment. Semiotics play a role in a discourse of space (Clarke *et al*, 2002) and, therefore, college management may feel they need to control the use of the space and the signs displayed. Also, an increased use of signs in spaces and audit workloads by college management to control their resources suggests that flexibility in teachers' use of these spaces is undermined (Baldry and Barnes, 2012).

Virtual spaces have their own semiotics and college management can control these through corporate standards and instructions for teachers to maintain a certain 'look and feel' to any web pages. When teaching in virtual learning spaces there is a change of pedagogy and the role of the teacher needs amending (Laurillard, 2012). Through the design of the material, the layout of the course or the online communications used in the virtual spaces, the teacher needs to create an explicit narrative path through their online work.

Even though this can be flexible to cater for different pathways for each learner, all of the participants in the space need to understand the objective of the journey and the optional processes to get there. Even though the flexibility of using online learning spaces is a huge advantage to the teacher, allowing them the freedom to explore new methods and create large, dynamic, learning landscapes online and in the physical environment using a blended methodology, it could be argued that online learning can create more managerial controls. All activities online can be monitored and accounted for. The UK government has set an agenda to increase digital literacy in education and for teachers to employ more learning resources online (BIS, 2014). Reports by JISC (2015) and Learning Futures (n.d.) showed that some FE colleges have altered their pedagogy to include workshops in which learners study a percentage of their programmes through the computer-based medium.

2.7 Negotiating with learning spaces

In my study, I initially set out to identify if the new learning spaces in City Green College were being used by the management as a method of control and a way to get staff to conform to the vision of the college. However, I needed to be conscious of Duggan's (in Boddington and Boys, 2011) statement that if the space becomes regulated too much and in short supply, the users of that space become very vocal in their complaints. This vocalisation of the complaints about the lack of classrooms is why I considered there to be a conflict between the management and the teachers

regarding the learning spaces at City Green College. It is in the centre of my perceived paradigm between the need to control space (to measure contact time with learners) and the freedom for teachers to teach in what they deem as suitable space for learning that the delicate negotiations need to take place. Duggan suggests that educational organisations are concerned about control, as estates managers can become agitated about saving costs and teachers usually want more space. It is, therefore, important that there is effective dialogue between the different parties.

The initial hypothesis for my research (which I amend after analysing my data in section 4.3) was based on the belief that the management of the learning spaces at City Green College was becoming undemocratic and that the management felt that they needed to tightly control resources. This relates to Deleuze's (1992) definition of modernism as a society of control. He states that society used to be based on a concept of sovereignty, in which taxes and death ruled. Now, he argues that society uses control to rule and even though new models of society may arise, control continues to permeate these.

Deleuze states that current society is concerned with products, not process, and that market forces are the ultimate controller. He also exclaims that discipline under sovereignty was long-term, whereas modern control through market forces is only short-term and continually evolving. Even though Deleuze (1992) is concerned by society being controlled by market forces and that education can often be seen as part of this society, he suggests that education is returning to a model of sovereignty that is not democratic, as the management act as monarchs ruling over their subjects (teachers). School

and college management teams are finding ways to control and chastise teachers that do not take into consideration any research and they use continual staff development to encourage teachers to conform. This would suggest that the senior managers at City Green College see the staff as assets, another resource to manage and control.

My second research question explored the potential use of the learning spaces to transform practice and I initially had a hunch that the college management was utilising the spaces through resource management (room bookings and timetabling teaching) to use fewer classrooms and increase the use of the more economic open learning spaces. They were attempting to transform teaching and learning to a more independent learning approach for economic, rather than pedagogical reasons (as discussed by the managers in chapter 4). Gojkov (2012) stated that education management seems to have developed into a type of modernism through its need for organisation, structure and management of goals. This cultural framework aligns itself with the development of a 'product curriculum', through which Sheehan (1986) suggested that learning outcomes drive teachers to guide students to goals that meet economic and societal needs.

My study is exploring how space is being used to transform practice and argues that management could make use of space to control assets or that teachers could use space to define teaching strategies. I need to consider the arguments of Gans (1962), and Rogers and Vertovec (1995), that planners can overestimate the role physical or virtual space play in altering human

behaviour. These authors suggest that it is the interrelationships with those using the spaces that actually alter behaviour, not the space itself. However, others (Laguerre, 1990; Pinder, 2005) argued that the behaviour of users within the spaces is altered due to the social rituals that occur there, triggered by the association of these rituals and semiotics of the space (teacher space at the front of the class and learners all facing forwards towards the teacher). Later in my thesis, in the discussion in Chapter 5, I identify the influence of the elements of neoliberalism on these associations and how this develops into an evaluation of the identity of a teacher.

Teachers and students of City Green College are likely to have memories of their own experiences of learning in certain spaces and that this is likely to affect them behaviourally and cognitively (Thomas, 2010). This could be an advantage if the students and teachers have had a positive experience but it could also be a disadvantage if the previous experience was negative. Even though there is an expectation that the new learning spaces in FE Colleges allow flexibility and empower staff to move freely between them, teaching cannot be totally liberal and free because there are clearly defined goals that need structure and these goals need to be measured and therefore the space needs to be defined by its users or asset managers (Laurillard, 2012).

Hanson (2009) suggested that teachers, make use of routine activities to establish a self-identity through a continually revised ontological narrative. When new demands are made on the teachers this narrative of identity can be broken and identity can be challenged. Later in my study, the importance

of the identity of the teacher in the new learning spaces comes to the forefront in the discussions of my data in chapter 5. Giddens (1991), in his study of teacher identity, noted that alterations to routines and changes to the narrative can cause anxiety and stress. Over the last few decades, there has been a transition within teaching practice, from a didactic approach with the teacher standing at the front of the class to a more student-centred approach, making use of active learning techniques (Blackmore and Kandiko, 2012; Boys and Boddington, 2011; Popkewitz, 2009). Amory (2010) suggests that the identity of a teacher is challenged further by the college management, as they require the implementation of controlled assessments and educational targets. At the same time, the managers encourage teachers to facilitate learning through a variety of teaching strategies and the fluid, dynamic, use of physical and virtual spaces for independent learning.

Anderson (2008, p16.) argued that the liberation of teaching from its didactic history is supported by virtual learning environments and other learning technologies. This allows students and teachers to 'collapse time and space' and engage with learning anytime and anywhere. Boys and Boddington (2011) highlighted that the physical architecture of the new college buildings, like that of City Green College, promotes this approach through dynamic, fluid use of the learning spaces, which are saturated with wireless technology. This wireless technology allows students to use their own devices and create their own spaces for learning. This information technology infrastructure informed my third research question, which explored how teachers negotiate with the spaces that could be used for learning. The wireless technology removed

barriers to accessing resources and Johnson *et al* (2013) noted that education can happen in the café areas, libraries, comfortable seating areas, and outside spaces around the building. Liu (2007) agreed, stating that the use of these virtual environments allows students to expand their learning spaces to engage in education in coffee shops, public transport and at home. The teachers, therefore, were presented with opportunities to support learning in different spaces. However, even though they made use of the virtual learning spaces, it seemed that the teachers continued to try and negotiate access to classrooms rather than make use of the open learning spaces (see chapter 5).

2.8 Theoretical frameworks for studying learning spaces

In this section, I justify the use of the theoretical framework chosen for my study, show how it relates to the data collection at City Green College and present my critique. I conclude the section by highlighting alternative theoretical frameworks I could have chosen for my study.

2.8.1 Theoretical framework for this study

The concept of Boys' spatial triad is a relevant theoretical framework for the aims of this study. Boys (2011, p.11) suggests that space is made up of: 1.ordinary routines, 2.attempts to transform these ordinary routines and, 3.participants' 'perceptions of *relationships to* and *negotiations with*' space to transform the 'ordinary' routines. This triad relates to my three research aims of identifying the spaces being used by the teachers in City Green College's new building, an examination if there is an expected change in teaching

practice through the use of the new learning spaces and exploration of the issues raised by teachers while attempting to use the new learning spaces at the college. Boys (2011) adapted Lefebvre's (1991) triad to map the use of spaces in education. He also suggested that space was made up of a triad of elements: 1. spatial practices, 2. representations of space and, 3. representational perceptions of space. Boys considered Lefebvre's triad to be too political and of its time, as Lefebvre based his framework on studies of urban environments in the 1970s and incorporated the ideology of Marxism to consider who controlled the space and who was controlled. Boys adapted Lefebvre's framework to ensure it was more contemporary and suitable for the exploration of educational spaces.

Utilising Boys' spatial triad, my study followed my aims and subsequent research questions by examining the use of the new learning spaces from three perspectives. Firstly, in my research, the ordinary routines in City Green College are identified by the learning spaces in which planned teaching and learning activities take place. It is possible to compare how the routine use of space had developed by examining historic observation notes from the old college building and observations of teaching practice in the new building. Secondly, my study examined the opportunities provided by the architecture of the physical spaces, supported by the virtual spaces, in City Green College's new building to potentially transform any ordinary routines from one expected status to another. The perception of the college management and the architects were explored to examine whether there was any expectation on their behalf that the space itself was to be used to encourage the

transformation of the routines of teachers towards another desired state i.e. to make use of spaces other than the classroom and increase independent learning. Thirdly, through interviews with the teachers, my research then explored the teachers' perception of these spaces and how they are negotiating their use, by discussing any issues or barriers they may have come across.

2.8.2 Critique of the theoretical framework

Even though it seems that Boys' spatial triad is a framework that could be used to support my study, it needs to be noted that there is an assumption in the spatial triad that the educational spaces have been developed to support the transformation of new practices. There is little scope to explore the wider economic or environmental advantages of the new learning spaces. I need to be aware that this could lead to elements of learning spaces being disregarded in my research and misleading conclusions being drawn. Boys' work on space is a more pragmatic approach than Lefebvre's (1991) work, which suggested that society and communities create their own space and that space forced by planners onto society would not work as intended. The architecturally developed environment at the centre of my study could create complex social interactions and communities of practice outside of the observed sessions and defined learning spaces. However, observing the whole campus would be difficult and, therefore, is beyond the scope of this study and using Boys' framework will enable the study to remain focused on the key areas. These areas include identifying the ordinary routines, exploring how the physical and virtual spaces may be being used to attempt to

transform these routines, and exploring how the teaching staff perceive these routines, including any transformation attempts.

Soja (1996) also amended Lefebvre's work and suggested his own triad to explore the dynamic development of space. Soja's study focused on what he termed the 'Thirdspace', how users actually use the space despite its planned objectives. However, it is Boys' framework that allows an examination of the negotiations that teachers make to use the learning spaces and the attempt to use space to transform ordinary routine that fits with the hypothesised organisational objectives of the FE College in this study. Boys' framework is focused more on education than the more general spaces explored by Lefebvre and Soja.

2.8.3 Alternative theoretical frameworks

Other studies have used alternative frameworks to study educational space. Smith (2017) explored how the new learning spaces impacted on how staff and students interacted. However, unlike Smith, my study examines a different viewpoint by focusing on how teachers interact with the spaces. My study is closer to Deed and Lesko (2015), who made use of a case study approach using interviews and observations to identify the relationship between the configuration of the learning spaces and the reaction of the teacher. However, they examined the developments of new buildings through teacher habitation³ as a form of system adoption. I considered using the school climate model suggested by Owens and Valesky (2007). Their model

³ Habitation is a form of system adaptation where the user adapts their practice to work within the environment.

evidenced the relationship between school design and teaching and learning. However, Owens and Valesky's focus was predominately on ecology, how the users relate to each other within the space and how the space effects these relations and the link between their findings and teaching was ill-defined. My research is less concerned with the ecology, as defined by Owens and Valesky, and more on the staff culture and organisational elements of an FE college.

2.9 Conclusion

The new building at City Green College has a range of classrooms, open spaces and integrated technology to allow ubiquitous access to virtual spaces. There is the opportunity for teachers to develop routines of teaching to incorporate all of these spaces in dynamic ways, the type of flexibility suggested in the Building Colleges of the Future programme (Besten *et al*, 2011) and in the government strategy for the future of learning (Clarke *et al*, 2002). The ability to use these spaces would also closely match the theories of Dewey (1966) in creating much more holistic learning environments than offered through a classroom space alone. My study started by exploring where the 'ordinary' teaching routines for a teacher in City Green College occur, by examining the teacher's perspective of the learning spaces similar to the study by Clarke *et al* (2002). Soja (2006) and others (Lefebvre, 1991; Massey, 1999), view spaces through the users who occupy them, which could be interpreted as the learners in this study. My research is focused on the teachers' perspective rather than the learners, as teachers first need to act as

guides to identify the possibility of physical and virtual spaces for learning before the students can develop the confidence to explore these for themselves. Boys' (2011) spatial triad forms the framework for the research questions and the study whilst considering the research that has gone before (Gibson, 1977; Thomas, 2010; Bennett, 2011). My study also explores Giddens (1991) concern that spaces challenge identity and, therefore, the new learning spaces of City Green College could test the identity of teachers, which could cause anxiety and stress.

Chapter 3: Methodology and Methods

3.1 Introduction

In this chapter, I begin by discussing methodologies (3.2) and take a critical look at the particular methods appropriate for my research (3.3). I explain the choice of qualitative over quantitative methods and justify those methods that were discarded. I link the methods chosen to my theoretical framework (Boys', 2011, spatial triad) and demonstrate how the methods were used to collect data to enable me to address my three research questions (see section 1.9):

1. *In which space does teaching and learning occur at City Green College's new building?*
2. *Is there an expected transformation of teaching through the use of the new learning spaces?*
3. *What issues do teachers face when negotiating with the new learning spaces (gaining access and using the different types of learning space)?*

In section 3.4, I outline and justify the sample of participants chosen for this research and section 3.5 explains how I used a pilot study to trial the methods to help tune the measuring instruments. I outline the analysis phase in section 3.6, before discussing the ethical consideration in the final section (3.7).

3.2 Methodology

Methodology can be defined as the description and analysis of research methods from a particular ontological viewpoint, rather than the actual use of methods themselves. Wellington (2008, p22) stated that 'methodology is

defined as the activity or business of choosing, reflecting upon, evaluating and justifying the methods you use', adding that without this discussion the reader cannot 'judge the value of the work'. Grbich (2013) added that methodology is a set of guidelines underpinning the collection and analysis of the data.

Discussing methodology allows the reader to identify my epistemological and ontological standpoint on how knowledge and data have been collected and analysed. A discussion of my positionality follows in section 3.2.2.

3.2.1 Ontology and epistemology

Wellington (2008, P.199) described ontology the 'study or theory of 'what is', i.e. the characteristics of reality' and 'the study of nature and validity of human knowledge, e.g. the difference between knowledge and belief' is termed epistemology (Wellington, 2008, p. 196). The ontological perspectives in educational research raise two polar approaches to data collection; the positivist approach and the Interpretative approach. A positivist approach to research, in which reality can be measured by the collection of numerical and statistical data, can often be one that is considered to be more accurate, less value-laden, and neutral than the interpretive approach; an assumption based on studies using data collected through defined, reliable and repeatable methods. The positivist approach to research makes use of methods that collect numerical, quantitative, data from which analysis draws out significance in any change or pattern that may emerge. This is in contradiction to the more subjective, interpretive approach of using qualitative data. Researchers using an interpretive style of study accept that the world is complex and that describing reality requires more than just studying numbers.

Unlike those who take a positivist approach, the interpretivists accept that research draws on participants' multiple realities depending on their subjectivities and contexts which are best researched through qualitative data collection methods. Researchers, such as Tooley (2006) and Ball & Gewirtz (1999) have debated the value of both approaches to research, with the researchers highlighting the merits and disadvantages of each.

Carr (2007) argued that the process of collecting, presenting and analysing the supposedly objective data in positivistic research is laden with values and epistemology of the researcher. This will affect the instruments and techniques used to collect the data and the commentary on the analysis.

Tooley (2006) in particular suggested that research based on the interpretative methodology is not as robust as positivist research, as it lacks impact and cannot be repeated. However, education deals with the diversity of human life 'an activity between people' (Bakker and Montessori, 2016, p.4) and investigating educational issues using quantitative methods and statistics, given their reductive form, fails to capture this complexity. I agree with the arguments of Ball & Gewirtz (1999) and Wilson (1992), who stated that without interpretative research the context and story of teaching and learning would be lost; therefore, the value of the conclusions would be lost. Boyd (2000, p.11) though, added to the argument by stating that educational research is 'tainted by opinions', ideas and popular science than any hard data-driven evidence. One way to support the positivistic research viewpoint of attempting to avoid issues of a study being value-laden is to write the research as if the researcher is not part of the study. However, I disagree with

this and prefer the argument of Scott and Usher (2010) who believed that any researcher that avoids using 'I' in research to be impassive is dishonest. Sikes (2004) staunchly defended the use of 'I' in research stating that the researcher should take ownership of the study. Alvesson and Skoldberg (2000) agreed with this, adding the researcher should be reflective of the journey through the research and that the results are just one viewpoint from my positionality, allowing others to interpret the results in a different way. During my research, I constantly had to guard against my assumptions influencing my research decisions by adopting a continuously critically self-reflexive approach. I made use of a research diary throughout my study and reflect on this in chapter 6.

3.2.2 The researcher's positionality

Even if I tried to write the thesis in the third person, I could not escape the fact that I am part of this study. I conducted the study in my work environment, and I have an interest in how spaces can be blended to create a holistic learning environment. As suggested by Scott and Usher (2010), it would be dishonest of me to avoid stating my position and avoid using 'I' in writing. My own ontology is based on my classic science background through my study of chemistry as an undergraduate and, in the past, I would have felt more comfortable to collect quantitative data and rely on the infallibility of statistics to explore patterns and significance and draw conclusions. However, exposure to the world of educational research and reading around the subject has highlighted the complexity of the sector through its multiple stakeholders and education as 'an activity between people, between generations, between

teachers and students and amongst teachers and students' (Bakker and Montessori, 2016, p.4). In particular, the importance of human interaction within an educational context moved my epistemology to a more interpretative position. Studies such as Rockinson-Szapkiw's (2012) investigation of perceptions of online collaborative workspace, Akkoyunlu and Soylu's (2008) study of student perceptions of blended learning environments and Sad and Goktas' (2014) research into the perceptions of educators use of mobile technology have shown me the need to explore the narrative behind the data to be able to discuss the participant experience of the topic being studied. Within the studies of Sad and Goktas (ibid) and Akkoyunlu and Soylu (ibid), the researchers used interviews to identify the context in which the participants were using technology in teaching and this led to the identification of barriers and successes. Using more qualitative methods will allow me to explore in-depth the interactions and negotiations teachers are engaging with when using learning spaces to carry out their teaching routines. Collecting quantitative data may have shown how often space was used or the reasons space was chosen, but may not have allowed the ability or flexibility to expand the questioning to examine the perceptions staff have of learning spaces, reasons for (or any issues in) their use of space. As mentioned in section 3.8, my thoughts on how the physical and virtual learning spaces should be blended could have created barriers to the research. However, the pilot study gave confidence that the staff of City Green College were open to being observed and interviewed in a way that generated data (seemingly) not influenced by my views.

3.3 Methods

The methodology informs the methods chosen and there is a broad range of methods that could be used to collect data, such as; observation, questionnaires, focus groups, and surveys. Bazeley (2011) argued that to study human behaviour, and the processes that people follow, research needs to make use of both quantitative and qualitative data. As educational research involves human behaviour, it could benefit from a mixed methods approach in an attempt to validate the data. However, Bryman (2007) highlighted that it can be difficult to use both approaches and be able to blend the data in such a way that the analysis appears valid. For my research, I took an interpretive methodological approach to collect data and used two different methods within my study. I chose observations of the participating teachers in the new building at City Green College to identify the learning spaces used and interviews with the teachers to examine how they implemented the use of these spaces. I also interviewed the architects and senior managers involved in the design and development of the new learning spaces at City Green College and the middle managers, whose responsibility it was to support teachers to use the spaces for teaching. The observations allowed me to record a representation of how the learning spaces were being used and the interviews enabled more engagement with the participants and freedom for them to discuss their perceptions of the learning spaces.

The research methods of observation and interview I used in my research enabled me to collect and analyse data for each of the elements of Boys'

(2011) spatial triad⁴ in the context of City Green College. For example, observations were chosen as a method to examine the ordinary routines of teachers in City Green College and interviews were used to explore any influence the new learning spaces may have had on transforming the routines of teachers. The interviews also explored how teachers were negotiating with these spaces to enable learning. Watkins (2005) suggested that if a researcher is using spatial triads as a framework, then they need to do this holistically to ensure that symbols, practices, and representations are discussed in context. However, even though my case study examines all aspects of the triad, exploring the elements of the triad individually (through each of my three research questions) helped me structure my study and highlight teachers' routines i.e. which spaces they use, and how they may have changed practice through the use of these spaces. As well as methodically exploring each element of Boys' spatial triad, my research is a case study that focuses on one particular FE College. I chose to focus on one college as Bennett (2011) admitted that a multiple case study approach, gathering data across several institutions, was very difficult. He suggested that each organisation needs to be considered individually. Bennett (ibid) added that it is difficult to compare and generalise when each college has its own history, unique geographical location and demographic of user.

3.3.1 Observations

Observations were selected as a preferred method of data collection for two reasons. The first is to record at first-hand how learning spaces were being

⁴ Boys (2011) Spatial Triad: 1. 'Ordinary routines' in the learning spaces, 2. Use of space to transform these ordinary routines, 3. The negotiation of the ordinary routines and the space to transform practice (see section 1.4.4).

used in the college and secondly to identify the routine teaching practice used by the teachers. Creating what Simpson and Tuson (1995, p.11) called a 'rich narrative' of the activities taking place during a specified time period. The data collected from the observations supported the analysis of data for my first research question, '*in which spaces does teaching and learning occur at City Green College's new building?*' In my study, observation data is collected from two different sources: 1.archvied observations of participating teachers in the old building of City Green College and, 2.observations of the teachers in the learning spaces of the new building. Observation has been used in a variety of different ways in other studies of learning spaces, but carry the potential to trigger an imbalance of power relations. I, therefore, felt it important to justify the kind of observations I used in my study, explain how they were carried out and the issues of using observation as a data collection method during the research process.

3.3.1.1 Kinds of observation

I use observations in two different ways in this study. First, I obtained archived written observations of teaching and learning collected in the old building of City Green College. These gave a background context to how the learning spaces were used by the teachers before they moved into the new building. Second, I observed teaching and learning in the new building to record teachers' use of space when they had access to a range of new learning spaces. These two sets of observations allowed me to compare teachers' routine uses of learning spaces in the old building to the new and provided an opportunity to identify differences between them.

The observation data allowed me to examine the use of learning spaces by the participating teachers. I could have focused on interview data alone to provide teachers' narrative on their use of learning spaces. However, as Odhabi (2007) warned, the interviewee may have omitted to describe subtle changes in their use of space, given it is a naturalised practice in which they consciously do not notice their actions. The interviewee may also neglect to discuss aspects of their use of space as they feel that the information is not important for the interview (Hoinville and Jowell, 1997). I considered, as a potential method Clarke *et al's* (2002) semiotic analysis of maps and drawings of space to identify if open learning spaces are transformed into an enclosed teaching space. Researchers in Clarke *et al's* study explored the flexible use of space in FE colleges by students, teachers and support staff and their interviewees were asked to draw a representation of where they worked and studied. These diagrams were then analysed to look for signs associated with learning and patterns in learning space arrangement. I rejected this approach after the pilot study (see 3.3.3) because I was concerned about the accuracy of the representation of the space used in these drawings and also needed to capture the amount of time being spent in different spaces. Observing teachers using the spaces and then supplementing observations with teacher interviews would furnish me with reasons for teachers' use of space and reward me with a richer data set to analyse.

The templates used for the archived observations at City Green College started with a narrative of the context of the environment in which the learning takes place and any movement around or between spaces was commonly

noted. The archived observations I collected for my study contained this information, though, Crow and Edwards (2012) warned that archived observations may not have been collected in a way that serves the needs of the current research and could present an overwhelming amount of information. It is also possible, that the first observer may not have used the same vocabulary I used in my study, leading to confusion or ambiguous data (Bornat, 2005). The archived observations of lessons in the old building of City Green College were originally focused on the activities that took place in the learning spaces, and not the space itself. This alternative perspective could have raised issues with the chronological order of the findings and Van den Berg (2005) noted that gaps in the original collection method could become apparent during the new research. In chapter 6, I comment on the effectiveness of the data from the archived observations and the issues that occurred during my research.

3.3.1.2 How observations were used in my study

I felt I needed to be physically in the room to observe the interactions between the participant being observed and the space, rather than using a webcam or video recorder. Being present in the room as an observer helped me to consider Fetterman's (1989) suggestion that there could be influential cultural issues that affect the use of space and being in the room, and part of the culture, enabled me to gain an understanding of the events that took place within the learning spaces. However, this could have meant I became part of the observed lesson, becoming too close to the action and, therefore, as noted by Simpson and Tuson (1995), miss activities taking place on the edge of the session. My placement during the observation was important, as there

was the risk while collecting my data that I may not have seen subtle uses of other spaces, such as online space via pre-session videos or content on mobile phones. I could have become too concerned about what is taking place in the physical space in which I was situated. I planned to sit in the back corner of the learning space for each observation with a view of the whole space. As an alternative, there was the option to use a video camera for the observations to capture evidence. Fife (2005) added that using a video camera would have given the distance between the subject and the observer. Unlike an observation in which the researcher is present in the classroom taking notes, the recorded video could then be replayed numerous times to see if any further data could be identified (Cockburn, 2005; Fetterman, 1989). Schaeffer (1995, p.255) suggested that videos can help researchers in four ways: 1.videos allow the observer to view the complexities of activities in their natural settings, 2.videos can be scrutinised later and therefore this increases their reliability, 3.videos can be reviewed by both the researcher and the subject, thus leading to more in-depth analysis and, 4.videos can also link the abstract theory to the observed activities upon which they are based.

However, despite these benefits, in my experience, a video camera in the room still causes the 'observer effect' discussed by Washer (2006) and Haw and Hadfield (2011) and could cause the participants to act in an unnatural way. I also wanted to avoid Cockburn's (2005) concerns that the research using a camera for observation would not be in a position to discover the aforementioned subtle cultural, social and institutional complexities that affect the events taking place as the field of view of the camera is restrictive. It would also be difficult to follow and capture data on any movement between

spaces of the teachers participating in my study without employing a roving camera operator.

How to record the observed session needed careful consideration and I explored three options to frame my note taking, as I was conscious that Simpson and Tuson (1995) had stated that observation can yield a rich set of data but it needed to be reliable and, therefore, have a framework and scope. Observation recordings can be: 1. event-based during which the observer notes details on each activity that takes place during the observation, 2. time-based, recording everything that occurs each minute or, 3. 'sign and category' (Borich, 1977, p.137) during in which the observer is either looking for and recording particular 'signs' of events occurring, recording them only once no matter how many times the event occurs or recording all events in categories over a specific time period. I based my choice of observation framework on my experience as an observer of teaching practice in my role as a Lecturer in Teacher Education. I chose option two, time-based recording, based around Ethnographic field notes described by Sanjek (1990), as I agreed with Sanjek's statement that field notes are not restricted to categories and enable the researcher to tell the story of the spaces used. Medley and Mitzel (1958) stated that the three observation frameworks highlighted above can support the researcher's attempts to quantify qualitative observation methods and are useful for new researchers. Mitra and Rana (2001) supported this by stating that non-code-based observation notes are subjective, caused by the huge range of variables present in the real world and that the observation is not taking place in a controlled environment. To avoid arguments of subjectivity

caused by the unstructured field notes, I need to ensure that any coding used to analyse the data is transparent, justified and clearly defined (see chapter 4).

I decided to use unstructured field notes as described by Emerson *et al* (2011) and Sanjek (1990), which allowed me to record transparently and chronologically the places of learning and capture data on all of the spaces used. All of the activities that took place within the observed learning spaces were recorded, along with the use (or mention) of any virtual spaces. The observations for my research took place over half a day of routine activities of each of the fifteen teachers. Although this was not a substantial length of time, as requested by Fetterman (1989) who commented that observations should take place over a substantial length of time to effectively gather information, each observation covered more than just one teaching session. I had the opportunity to collect data on the use of a number of different spaces that could be discussed in the subsequent interviews. There was a range of alternative methods of observing participants use of space that I could have used for my study. A number of studies that research the use of public spaces make use of time logging and GPS data to inform a discussion on the utilisation of space, such as the study by Nielsen *et al* (2014). However, rather than approaching my data collection on how often teachers use space, my research uses the observation data to support a narrative of the use of space to inform a discussion regarding why the space was used. There is a study by Holland *et al* (2007) on everyday life at school, which devised an observation sheet that allowed researchers to diagram the space and record the

interactions and demographic characteristics of the people using the space. This data collection method was an option for my own research, as was a prescribed observational template as suggested by Pearson (2009). However, the unstructured chronological fieldnotes allowed me to capture a record of the use of space by the participating teachers.

As well as choosing a framework for observing the teachers in the learning spaces, I needed to consider if I was going to act covertly and observe the participants without informing them I was doing so. Wellington (2008) explained that covert observation may allow evidence of natural behaviour to be gathered. However, covert observation is against the ethical guidelines of informed consent and for my research, it could not be justified (see section 3.5.7). For my study, there was no need to act in a covert manner, as knowing that there was an observer in the room may have affected the performance of the participant but it would not affect the learning spaces used by the teacher. McMahon *et al* (2007) worried that teachers often fall into an active teacher/passive student model when they are being observed and Washer (2006) and Haw and Hadfield (2011) suggested that participants change their practice because they are being watched. However, my research wanted to discover why the teachers use a particular space, and not the actual activities themselves. Any change in performance was not an issue and the actual learning spaces being used by the teachers participating in my research were already selected through their curriculum planning. Establishing myself as a non-participant in the observations allowed me to monitor the routines of the teacher and any negotiations they have with the learning spaces. The concept

of non-participant observer does contradict Emerson *et al* (2011), as they state that a researcher taking field notes in a true anthropological manner needs to be part of the community that they are researching. I felt that I was already part of the community, as I work within the learning spaces being investigated and I have an interest in how they can be used for my own teaching and learning. I felt it essential to oppose Emerson *et al*'s concerns and distance myself from the practice being observed to gain other viewpoints and not impose my values directly onto the data.

3.3.1.3 Issues with observations

Two issues with the observation methods I chose for my research were:

- 1.inability to observe activities beyond the learning spaces of the college and,
- 2.limitations in the amount of data I could collect as a result of observing practice at a particular time and context. In the first case, I was unable to observe in detail the activities that took place in other spaces beyond the college, such as outside spaces, cafes, and at home. These spaces were beyond the scope of this particular research as they are spaces that were not negotiated by the teachers and, as discussed in other studies (Peach *et al*, 2013; Thomas, 2010), it is often the learners who chose these spaces instead of the educator. In the second case, during the planning of my data collection, I was conscious of Dholakia and Kumar Sinka's (2005) warning that observations on their own produce less data than an ethnographic study, as they are examining practice at a particular time and not considering data longitudinally. This could have the effect of missing data relevant to the study or risk the researcher making inaccurate assumptions. A lack of a wider appreciation of context could have been an issue for my study but the

observations were followed up by an interview allowing the teachers to place the observed session within a wider remit of the college and their teaching.

3.3.2 Interviews

Alongside observations, my research also used interviews to collect in-depth data on why specific learning spaces were chosen. The interviews enabled exploration of the issues that needed to be *negotiated* to gain access to these spaces and any problems that arose during their use. Interviews were also carried out with the managers and architects of City Green College's new learning environments. Thus, going some way to examine my second and third research questions: *is there an expected transformation of teaching and learning through the use of the new learning spaces?* and, *what issues do teachers face when negotiating with new learning spaces?* In this section, I explain first why I chose interviews as a method of data collection, second, the structure of the interviews and third, issues to be considered regarding the choice of an interview as a research method.

3.3.2.1 Why I chose interviews

Using interviews as a qualitative research method represents my ontological position in which I credit that people's views, understanding, and interpretations form their social reality. The method also allows the freedom for the research participants to discuss the topic further (Seidman, 2013, p.9). Interviews do have their issues and Maxwell (2013) explained that the interview is usually about a previous event and the participant may not remember accurately what took place. Also, interviews can be difficult to set up and arrange (finding the right place and the right time), and they can be

time-consuming. However, for this research, it was important to be able to delve further into the thoughts of the teachers on why they chose particular spaces and to hear their views on any potential constrictions being imposed on them. I mitigated these risks by arranging the interviews at least two weeks in advance to allow for negotiation and I started the interview by allowing the teachers to reflect on their use of space, using my observation notes to support the recollection of the events.

3.3.2.2 Structure of the interviews

The interviews for my research were semi-structured and had a framework of questions to support the topic being discussed (see appendix 1 and 2). I was conscious of Van den Berg's (2006) argument that such interviews are too structured and may not gain enough depth in the data to be analysed effectively. However, having a list of possible questions helped me frame and focus on the conversation. The questions were not followed in any strict order, and in some cases questions were missed out altogether to allow the interviewee to keep talking. For this reason, I did not send the interview questions in advance as suggested by Powney and Watts (1987).

During the interviews, I acknowledged the suggestions of Hoinville and Jowell (1997) to make use of silence effectively to elicit more information and allow the interviewee time to think and construct the answer. I also felt it necessary to derive data not only from what is being said but also how it is being said. Therefore, I used a Dictaphone to record the interview and this allowed the interview to be replayed any number of times during the analysis. It also enabled me to be able to identify the 'Paralanguage' (Powney and Watts,

1987, p.18), such as the speed of speech, voice tone, and volume. However, my hope to use the digital recordings without transcription proved problematic and in section 6.8.1, I explain the reasons for my change of approach. I chose a Dictaphone over a smartphone (which has similar functionality) because the Dictaphone avoided any distractions from notifications from other applications that are present on the smartphone and the battery life was more reliable. It was also less of a visual distraction during the interview process than a smartphone would have been. Once the interviews began, the participants ignored the presence of the Dictaphone.

3.3.2.3 Issues to be considered when using interviews as a method

As I work as a lecturer at City Green College, the use of interviews (and observations) in my study could have raised issues about the relationship between myself and the participants. Participants may have felt the information could be used elsewhere and they may have withheld talking about certain issues. It was also possible that I could have retained that information and mentioned it at a later date to the detriment of the participant. I was very clear with the participants that the information they gave was to be used only for my research and I outlined the ethical considerations and discussed the consent form with them (see appendix 6). In order to avoid the concerns of power relationships and bias in the data collection, Powney and Watts (1987) recommended using a professional interviewer. However, for this research, this solution would be too costly and not appropriate for small-scale research. In reality, the situation was more like that described by Ebbutt (1981), in which the participant held the power in the relationship. The need to arrange a time and place suitable for the interview, and to make sure that the

participant was comfortable in their surroundings (and supplied with coffee) to discuss the topic, switched the actual power. It felt as though I needed to pander to the participant for the interview to occur and if they did not then there would be no study.

3.3.3 Methods not chosen

I chose to use observation and interviews as methods to collect data for my research. However, during my studies, I read articles on research that used a number of alternative methods which I could have used to study learning spaces. It is important to acknowledge these methods and offer them as alternatives for future research. This section outlines these possible alternative methods and my justification for rejecting them for my study.

Clarke *et al* (2002), in their research on the flexible use of space in FE colleges, made use of the participants' hand-drawn diagrams to show the semiotics⁵ of the spaces that they were using. Using this method allowed the researchers to encourage the participants to discuss the spaces and describe what activities were taking place. I tried this method during the pilot of the interview by getting the participant to draw a diagram of the space they used when they were observed. I wanted to examine if this was a good method to compare the spaces observed and the perception of the use of space from the participant's point of view. However, unlike Clarke *et al*'s research, which centred on the participants' use of one particular learning space, my research discussed the participants' use of a number of different spaces over a longer

⁵ The symbols and signs the signify how the space is identified and how it should be used

period of time. Drawing diagrams for all the different learning spaces used would have been too time-consuming and missed the details picked up by the non-participant observation. I still think there is potential to use participants' diagrams in discussions regarding the *perceptions of and negotiations with* learning spaces to support recall during the interviews and this could be a method used in future research.

Upton and Fingleton (1985) measured the number of times participants visited certain spaces using a technique called Spatial Analysis. This was developed further by Neilsen *et al* (2014) to make use of GPS data logging devices to track participant's movements around a particular space. Spatial Analysis could have been a possible method for my research, but this technique works by tracking use and movement within one defined area or space. The learning spaces used by the participants within my study were located throughout the campus, and in the virtual spaces on the Internet, making this multi-modal use of space difficult to track in this way. Also, the GPS system would track the participants' every movement and I did not want to record every space used by the participants, as this would be intrusive and unethical. I planned to focus on places in which they had planned to facilitate some learning.

In a similar vein to Spatial Analysis, there was an option to develop an Inventory of Workspace (or room utilisation) tool, as a way of measuring the number of times a space is actually used (Agilquest, n.d.). However, this method, and Spatial Analysis, would only generate data on how many times

as space was being used, rather than exploring the issues and negotiations related to the planning and use of the space.

3.4 Sample

The methods I used in my research were similar to those used in Clarke *et al's* (2002) study, which made use of interviews to collect rich data regarding complex environments. However, even though Clarke *et al* sampled two different FE colleges and carried out fifty interviews. My study identifies more with their conclusion that each FE College is unique in their history, geography and demographics. In this section, I explain that the research for my study focused purely on the context of one FE College, City Green, and the teachers who made use of the learning spaces available in the new building. I outline the sample of participants chosen for my study and the size of the sample. The sample size in my study was relatively small but varied enough to create situational sampling as suggested by Gribch (2013) and explored the different contexts in which learning takes place within the college.

I focus on City Green College as a case study for my research, as I work in that environment, have access to a range of participants and it is an example of a large general FE college that has recently taken the opportunity to rebuild its learning spaces. My use of a case study approach follows Bogden and Biklen (1982) suggestion that a case study is an observation of activities that take place in a particular organisation and I followed Wellington's (2008)

advice that a case study is an effective approach to answer questions about why events are happening. Bennett (2011), in his study of learning spaces, sent a questionnaire to students and staff of six different educational institutions and used that data set to present findings on the most significant responses. However, for my research, a quantitative data set of this type would not allow in-depth exploration of teachers' perceptions of learning spaces. Rather than randomly sampling from the possible population, the sample group of teachers, managers and architects were chosen via 'convenience sampling' (Wellington and Szczerbinski, 2007, p.67). The sampling method I chose more closely matched the 'quota methods' (Johnson and Christensen, 2008, p.238) because a representative from each teaching department was chosen and each participant fulfilled my criteria.

My criteria for the selection of each teacher for interview expected that they taught within the new learning spaces of City Green College and that they have been observed in learning spaces within the old building. My criteria for the selection of the senior managers and architects expected that they were involved in some aspect of developing the new building and attended meetings in which discussions took place to outline the vision of how the new learning environment at the college was to be used. The middle managers were selected to represent each of the four main faculty areas of the college and each was involved in timetabling the learning spaces in the new City Green College building. I was acutely aware that I may not have been able to collect enough data to answer my research questions by restricting the

sample group through the criteria chosen, but this sample would reveal enough rich data in observations and interviews to support my analysis.

I interviewed fifteen teachers, four middle managers, four senior managers and two architects. The fifteen teachers worked in a variety of different departments throughout City Green College and had access to a range of different learning spaces. All of the selected teachers were teaching in the new building and were willing to be observed in practice; I also had access to the records of their previous observations in the old college building. More teachers could have been included, but this would have led to the generation of repetitive data and data saturation (Johnson and Christensen, 2008, p.205) as teachers within particular departments worked as teams and often followed the same teaching practice. The four senior managers were chosen as they held strategic positions during the development of the new building phase and they contributed to the vision for the learning spaces. Three managers were at director level, and the other was responsible for the line management of the Learning Development Coaches, whose role it was to support teachers to make effective use of the new learning spaces at the college. The sample number of managers was restricted by the limited number of senior managers involved in the development of the new college building and who had an input into the vision. The managers' interviews did provide a significant data set to identify the existence of an expectation that the new learning spaces could transform the routines of the teachers. The data provided by the senior managers was supported by interviews with the two senior architects who

were involved in the project and who had acted in key positions to turn the senior managers' plans into reality.

3.5 Pilot

Before carrying out the study, I piloted the observation and interview research methods. This section outlines the importance of a pilot study, how I carried out the pilot study for my research and the impact the pilot study had on my data collection methods.

Morin (2013) stated that a pilot study uses methods to perform a simulation of the actual data collection to define key features and avoid any disastrous pitfalls. In this case, I observed one teacher over several hours to see if field notes were a suitable device for recording the learning spaces used. I also interviewed a manager and a teacher, using draft semi-structured interview questions. Van Teijlingen and Hundley (2001) stated that pilot studies allow the development of the research questions and train the researcher in the use of data gathering methods. This was certainly true in my interview with the manager as the pilot led to rearranging the order of the questions.

My pilot study gave me confidence in my research methods. I agree with Frankland and Bloor (1999) that the pilot study allows the researcher to clarify the focus of the data collection. There can be an issue with pilot studies if the data from these are included in the research, because, the data collection method could be adapted after this pilot and, therefore, the data collected

during the pilot may not be an actual indication of the situation when the main research takes place. Also, if the same participants are used in the final research as used in the pilot, there could be issues as the participants have already had some exposure to the interview questions and been part of an observation. Van Teijlingen and Hundley (2001) argued that qualitative research suffers less from this type of contamination than quantitative, as qualitative data collection can be explored from different viewpoints. However, I used the pilot activity only to develop the data gathering tools and, to avoid these issues of contamination, none of the participants nor the information gathered was used in the actual research.

Hazzi and Maldaon (2015) suggested that a 10% sample size is enough to support an effective pilot study. As this research has a relatively small sample for the main data collection, it was decided that carrying out a test observation and interview with one teacher, and an interview with one manager would be enough to establish the effectiveness of the tools. The participants of the pilot study for this research were aware of its purpose and the pilot study did draw out some logistical issues of arranging observations and interviews around a busy workforce. For example, arranging observations and interview at least four weeks in advance would be needed to ensure that the participants could fit these within their schedules. Also, the teacher used in the pilot study worked part-time at City Green College and was only available for three days during the week, therefore, I learnt that considerations of participants' variable working patterns were needed in the planning of the data collection. Using field notes for observation during the pilot worked very well with no change

needed to the chronological note-taking of learning space use and the events that took place. The pilot interview with the teacher also demonstrated that the structure proposed for the interviews was viable and allowed the teacher to talk openly. The questions seemed to be in an order that was appropriate to elicit useful data and, also, the teacher interviewed during the pilot effectively talked about their use of space and their feeling towards it without too many prompts. There was no need to alter the interview structure for the teachers. However, the structure of the interview for the managers did require adjusting. After the interview, the questions and structure were discussed with the participant of the pilot and it was agreed that the questions around the use of learning spaces should be moved to after the questions around the vision of the new college building. Originally, I was concerned that discussing the vision first could affect the responses given for subsequent questions on the use of learning spaces. However, the manager participating in the pilot study suggested that the participant knew that the key topic of the interview was to discuss the new building and not asking about the visions till later stilted the conversation and seemed to place it in an inappropriate moment.

3.6 Analysis

After the data collection, I used thematic analysis to explore my findings by coding the observation and interview data gathered from all of the sources against pre-defined themes derived from the theoretical framework. In this section, I define thematic analysis, justify its use and list other possible analysis techniques I could have used and the reasons for disregarding these.

Braun and Clarke (2012) explained that thematic analysis allows the researcher to identify themes and look for patterns while making several readings of the data, without any coding prescribed before the analysis. This flexibility does mean that it is important to outline the ontological and epistemological frameworks that will inform the analysis, and define whether or not the study is focusing on the semantics (the specific language used in the data) or latent meaning (understanding the meaning through the words used) in the data. My analysis used themes to identify patterns in latent meaning from the observations and interviews, and using the triad gives the study a realistic perspective grounded in the reality of educational environments, rather than exploring the semantics of the words used by the participants in the interview responses. Using Boys' (2011) spatial triad as a framework, I was guided towards a deductive analytical stance as opposed to the possibly more original and creative inductive analysis. Boys' spatial triad is made up of three elements⁶ (see 1.4.4) and I used these to develop my initial themes, as those three elements also supported the development of my research questions (see 1.9).

I used the 'six-phase approach to thematic analysis' suggested by Braun and Clarke (2012, p.60). Phase one is data familiarisation, by reading all of the observation notes and interview transcripts numerous times, followed by coding the data in phase two and identification of themes in phase three. Once these phase three themes have been established, they need to be

⁶ Boys (2011) Spatial Triad: 1. 'Ordinary routines' in the learning spaces, 2. Use of space to transform these ordinary routines, 3. The negotiation of the ordinary routines and the space to transform practice (see section 1.4.4).

reviewed in phase four before being named and clearly defined in phase five. The final phase is the writing of the analysis. Data familiarisation involved reading and re-reading the transcripts to gain an overview and familiarity with the content. All the interesting points and questions raised through the reading of the information were noted. In the coding phase, there was more close engagement with the data and any key points or recurrence of codes were given a word or short-phrase to identify them. These codes then became the foundation to develop themes within the data collected via different methods. Themes were identified by examining the codes for distinct elements that related to the research questions during the interviews or identified in the observation notes. Reviewing the themes is a critical step to allow for a quality check on the analysis process. In this study, the themes were re-examined to ensure that they related to the research questions and were actual themes, not just a single coded event. The review process does mean that some themes, or codes, were discarded as they did not relate to the study. However, this is the nature of interpretative qualitative research and those cast-off themes were used in the conclusion of my thesis to inform suggested future study. After reviewing the themes, a definition of each theme was constructed and the themes were analysed in more depth before the findings were presented.

An alternative to thematic analysis is Interpretive Phenomenological Analysis (IPA), as described by Lyons and Coyle (2016), which uses a set of guidelines and semi-structured interviews to support the study to address a concern in the participants' lives. Even though my thesis is exploring the concerns

around the use of learning spaces through semi-structured interviews, it makes use of a broader range of research methods to explore themes in different contexts. For my research, I decided that the thematic analysis was more flexible than IPA and allowed me to make use of different methods of data collection (Lyons and Colye, 2016).

My study could have made use of Actor Network Theory (ANT) which explores the intended and unintended causal effects of interrelated real and theoretical objects and policies (Law, 1994). These objects are termed actors and relate to, or influence a change of state in, other actors (Latour, 1987). Callon's (1986) article on the study of the overfishing of St. Brieuc Bay scallops was an example of ANT in action. Callon, in an attempt to solve the problem, identified the scallops, fishermen, scientific colleagues and the three researchers as actors in a network. Each of these actors presented their own obstacle in overcoming the advancement of research into scallops in an attempt to prevent overfishing. The actors created a network of interests and influencers the researchers needed to explore to attain a positive conclusion.

In my study, I could have used ANT as a basis of data collection and analysis to identify the actors and the networks in the use of the new learning spaces in City Green College. In my case, the actors would have been the participants of my study (architects, managers, teachers and myself as the researcher), the learning spaces and the semiotics of these spaces (as discussed by Clarke *et al*, 2002). The actors could also have extended to the objects within the learning spaces (e.g. tables, chairs, display boards and

partitions) as they could have influenced the use of the space. ANT relates to the transitional nature of space and its use by different social groups with Callon (1986, p214) stating that 'translation [in ANT] emphasises the continuity of displacement and transformations'. Thus supporting the thoughts of Ingold (2000) regarding the transitional nature of space (see section 2.2). However, ANT was not suitable for my research as it does not take into account pre-existing power within the network and Whittle and Spicer (2008) described that the power of the actors should emerge from the study of the networks, rather than acknowledging what existed before. In my study, the management hierarchy of the college and the decision making autonomy of the architects had already influenced the development and use of the new learning spaces whilst excluding the opinions and concerns of the teachers (see section 4.3).

Within my study, I wanted to explore the interpretations of the teachers' use of learning spaces as they moved into the new college building. I was cautious of the concerns of Collins and Yearly (1992), who highlighted that ANT leads to analysis that is too descriptive and does not explain the causes of the issues. Callon himself noted that ANT needs to start from the point of view of free association of the actors in the network (1986, p.200) yet, in section 2.9 of my thesis, I explain that I support the work of Cockburn (2005), who explained that teachers need to act as guides to students in the new learning environments and, therefore, an existing relationship already existed when I started my study.

I could also have used Grounded Theory or Narrative Analysis to interrogate the data. Grounded Theory allows the researcher to make use of a number of methods to capture data, such as the interviews and observations I used in my study. However, Payne (2015) explained that the approach is often associated with analysing data to identify a new theory. The research in this study is firmly associated with an existing theoretical framework and is using the framework to structure the research. Sparkes and Smith (2012) described how Narrative Analysis focuses on the complexities of social interactions and the context of the participants' lives. This approach could have been used in my study to explore how teachers negotiate with the new learning spaces at City Green College. However, the study of the use of spaces in my research focuses on the expected changes to routines and the negotiations surrounding the use of the spaces, rather than the detail of the participants themselves.

3.7 Ethical considerations

For my research to be credible, I needed to demonstrate that the methods could be trusted and that the study was carried out in an ethical manner (Lincoln and Guba, 1985). The ethical considerations within my research process, including confidentiality, observation anxiety, and specific issues regarding participant's role within the college, are discussed in this section, along with an explanation of how I achieved ethical clearance.

3.7.1 Confidentiality

Howitt (2013) stated that confidentiality and decisions regarding how to analyse the data are important ethical factors in any research to ensure that data is not linked to an individual. These considerations also need to avoid the information being used for what it was not intended, such as evidence towards performance management processes. The teachers and managers at City Green College have a responsibility to adhere to the college policies and guidelines regarding the use of learning spaces. During my research, participating teachers could be concerned that anything I observed in practice or that was stated during the interviews, which contradicted these policies could have been seen unfavourably by the participant's line manager. The confidentiality provided during the data collection helped alleviate these concerns and no staff refused to participate. As an insider-researcher, there was a risk that my role as a Lecturer in Teacher Training within the college could have impacted on the power relation between me and the participant teachers and they could have considered that I was working to gather information for the college management. The participants may have chosen not to take part in my research or given me answers to interview questions that they believed were in support of college policies and not their own perception. However, while working at City Green College I had developed a positive and honest relationship with the participant teachers, evidenced through appraisal feedback, and made sure that I communicated the purpose of my study and the ethical considerations that I had addressed.

To retain a level of confidentiality, the names of the participants were removed or not included in the data. Instead, a coding system was used (see section 4.2). The college management did not have access to the data from this study to avoid identification of the participants. Through the participant information sheet (see appendix 5) and discussions before data collection, it was made clear to the participants how the data was to be analysed and any concerns were discussed. Also, City Green College is a pseudonym. Crow and Edwards (2012) argued that the use of a pseudonym for the college and codes for the participants could lose some of the context of the data. However, I attempted to avoid this by using a mixture of observation and interviews to capture the context of the learning spaces used. I defined myself as the custodian of the data generated by the project and the data was stored in an encrypted folder in secure cloud storage in a password-protected location. Only my supervisor and I had access to this data and the raw data was destroyed two months after publication of the thesis. Even though I mentioned earlier about the relevance of researching data retrospectively (see 3.3.1), the nature of my research data is based on specific individual observations and interviews and they will not be available for further study.

3.7.2 Observation anxiety

In any observation, teachers can become anxious about the pressure of being watched. This could lead to unnecessary stress on the teachers and negative learning experiences for their students (Mearns and Cain, 2003, p.72).

Teachers may also be concerned that the observation could be used to measure their performance and the information disclosed to the organisation. The objectives of my study were made transparent to support

the teachers through the research process and were always available for discussion. It was emphasised that the observations were to investigate the use of learning spaces and not as a measure of the quality of teaching and learning. It was made clear to the teachers and managers that all data will be confidential and destroyed two months after the thesis is published. The teachers and managers could have access to their own research data on request and had the right to withdraw at any time. It is also important to note that because this study was taking place in an educational environment with minors and vulnerable adults, I was conscious that there was the possibility that safeguarding issues may have been disclosed during observations and interviews. If a disclosure had arisen, I would have dealt with it in accordance with legislation and College policy.

3.7.3 Participant roles at the college

It is important to consider the ethics of the extent to which the researcher's interpretation of the data is a trustworthy representation of the participants' perception of the situation. I needed to be aware of not misrepresenting the participant during the analysis stage and avoiding the concern of Willig (2012) who suggested that, in using thematic analysis, the researcher can be too empathetic to the research. I could have spent time trying to identify differences in accounts between the participant's view and my perception of the reality of the situation, instead of analysing the participants' viewpoint, which is the focus of the research aims.

After each observation and interview, I wrote a reflective entry into my research journal to create an account of the research process. This created

an auditable document that could be reviewed to gain trustworthiness in my research and supported the writing of the conclusions in Chapter 6. Justifying the methods used in the research and being clear about the weaknesses helps to offer the reader a chance to make a judgment about the validity of the data. The study of learning spaces bore the potential to be vague and messy and even though using unstructured chronological field notes assisted the use of Boys' (2011) framework to study spaces, Emerson *et al* (2011) and Law (2004) stated that there is no single way to record what is being observed. The field notes for observations could have made it difficult to ascertain patterns and identify realities that are missing or hidden. However, Lincoln and Guba (1985) contested the use of the terms 'validity' and 'reliability' in social science research. They argued that these terms are positivistic and relate to scientific research conducted in laboratories that can be proven. Lincoln and Guba (*ibid*) suggested that it is better to discuss educational research in terms of trustworthiness, listing conditions that would allow the reader to trust the methods used as credibility, transferability, dependability, and confirmability.

Trustworthiness in my research was enhanced by gaining informed consent from my participants and gaining ethical approval from the university. In section 1.7, I also outlined my positionality and this enables others to make better sense of my research and the trustworthiness of my study (Wellington *et al*, 2005).

Regarding credibility, I used observations and interviews as methods to capture the context and data on the use of the new learning spaces in City Green College. These methods could act as a triangulation of data to ascertain the credible representation of the participants' input on their use of the new learning spaces (Tracy, 2010, p.838). However, I am aware of the argument of St Pierre (2013) that triangulation is a legacy of positivism in research and, as mentioned earlier, I rely on using more than one method to collect data and offer transparency of analysis to meet Lincoln and Guba's (1985) 'trustworthiness'. The observations recorded the teachers' use of the learning spaces and the interviews were used as a narrative to support them. Dependability is demonstrated through my description of the process and outcomes of my research. Chapter 3 enables readers to be able to evaluate the methods used. The comprehensive description of my research including the context, methods, sample group definition and analysis techniques allows others to replicate the study in other situations if they wish and enables transferability. I have also identified the limitations of my study to support this transferability. By stating my position, justifying my decisions and engaging reflexively with my research through my research journal, I have achieved confirmability. Reflecting on the entries in my research journal, and honesty about my positionality, ensured that my research conclusions were determined by participants and the context of my study and not influence by my bias.

3.7.4 Consent

Informed consent was sought through a participant information sheet (see appendix 5) and a signed consent form (see appendix 6). However, Wiles

(2013) asked if informed consent can be gained if participants cannot identify what the conclusion will be from the data, suggesting that instead ongoing or 'process consent' should be sort. I disagree with Wiles (*ibid*), as asking ongoing consent from a participant seems impractical and would not alleviate any concerns that the participants may have. For my research, I explained the study in the participant information sheet (see appendix 5 and 6) to the participant. The information included the extent to which they could access their own data and how they would be updated on the research outcomes. This became particularly pertinent when a round of redundancies at City Green College forced the interviews with the managers to be brought forward. I had to amend the interview schedule and adjust the interview questions to ensure that I asked if I could return to the participant if the data raised any further queries.

To contextualise the use of learning spaces in City Green College, and to identify any attempts to transform teaching and learning through the development of the new spaces, my research proposed to review previously-stored observations. These archived observations were recorded in the old building of the college and contained notes on the activities taking place in the previous learning environments. The earlier observations provided a context of change and also a baseline of teaching routines in the learning spaces before any changes to the architecture and IT infrastructure took place. Reviewing historical observations provides fresh insight into the data, though Crow and Edwards (2012) raised the question as to whether or not it is still valid, as the context has changed. For my study, it is valid to review the

archived data through a different lens, as Van den Berg (2005) argued that, even though it is difficult to re-interpret the context and check the observer's view of events accurately, the context itself is a contentious topic. Denying access to archived observations would constrict debate on change in the use of learning spaces. There could have been difficulty gaining retrospective consent for the new use of this archived data (Bornat, 2005) as the time elapsed between consent and archived data makes informed consent an unrealistic proposition. However, in my study, the participating teachers were still teaching at City Green College and they were able to give their consent to use their archived observation notes (see appendix 5).

3.7.5 Ethical permission

The process of ethical review involved exploring methodologies and methods with my supervisor and peers. These discussions and my thesis presentations at the EdD weekend study schools helped refine the methods and any ethical issues that these could raise. To ensure that the appropriate ethical considerations had been made, a form was completed (see appendix 3) and reviewed by my supervisor. My supervisor offered advice and guidance on developing the application further to ensure ethics panel members could understand the research and that ethical considerations had been addressed. The form was submitted to the university ethics panel and ethical clearance obtained (see appendix 4). There was also the opportunity during the pilot to test the ethical considerations and identify any issues arising. No ethical issues became apparent that had not already been identified and addressed.

3.8 Conclusion

Chapter 3 of my thesis highlights the methodology and outlines the ontological view of the research from which an appropriate selection of methods was chosen. I attempted to make the research process transparent from the onset by clearly outlining the steps I have taken and allow other researchers with differing ontologies and epistemologies to support or develop the research further. Even though I have a background in classical science and experience of positivistic research, I have worked in education long enough to appreciate the complexity of education and its actors and the need for an interpretive approach to educational research. The qualitative methods need to be used in this case to explore the narrative of the teachers' negotiations with learning spaces, which quantitative methods such as questionnaires would be unable to capture. My considerations of the research regarding educational spaces are supported by the thoughts of Geertz (1973) who stated that space is complex and requires layers of definitions, therefore, the study of space should be ethnographic and supported by a narrative that gives context. Mullings' (1999) added that as an insider researcher, I am able to share the language space with the users while collecting the relevant data. This justification of the methodological standpoint helps the reader to examine and critique the work and to develop a discourse around my data.

The use of observation of learning spaces, complemented by semi-structured interviews with teachers, managers, and architects, supports the theoretical framework of Boys' spatial triad (Boys, 2011) and the exploration of my research questions:

1. *In which spaces does teaching and learning occur at City Green College's new building?*
2. *Is there an expected transformation of teaching through the use of the new learning spaces?*
3. *What issues do teachers face when negotiating with the new learning spaces (gaining access and using the different types of learning space)?*

Issues surround the methods employed in this research that do need to be highlighted. The sample size is small and the study is geographically isolated. Even though there could be possible associations between the findings in my research and other educational settings, any generalisations are inappropriate and interpretive. Also, Goffman (1989) stated that there is a level of difficulty working in the place of research and this did have the potential of influencing both the data collection and the analysis in my study. The participants knew me, and my thoughts on how the physical and virtual learning spaces should be blended, and this could have created barriers to the research. However, the pilot study gave confidence that the staff of City Green College were open to being observed and interviewed in a way that generated data (seemingly) not influenced by my views. I was able to use the observation and interview tools to engage with the participants in a way that gathered their viewpoints.

The methods used in this research are not complex and attempted to record the use of learning spaces and interview discussions that supported transparency and mitigate bias as much as possible. Even though the data was gathered from different sources (observation and interviews), it was possible to integrate this information during analysis as the themes within the sources are closely linked to each other. There was a risk that the process of

analysis of the data may have been affected by my values, as highlighted by Carr (2007), but as the themes were reviewed by a peer, the data was analysed as fairly as possible.

Chapter 4: Presentation of Findings

4.1 Introduction

My research explored how the FE teachers of City Green College were using the learning spaces in the college's 'new' building. It also examined the factors that influenced their choice of learning space to answer my first research question (see 1.9). City Green College's senior management team held the opinion that in the new college building the teachers had the option of using a range of learning spaces consisting of classrooms, open learning spaces (spaces within the building that are outside the classroom) and online environments (4.4.2). Data was collected using observations of teaching and interviews with a range of college staff members and architects involved in the development of the new building. The data was then analysed using thematic analysis to explore my three research questions. These research questions arose from the theoretical framework of Boys' (2011) spatial triad:

1. *In which spaces does teaching and learning occur at City Green College's new building?*
2. *Is there an expected transformation of teaching through the use of the new learning spaces?*
3. *What issues do teachers face when negotiating with the new learning spaces (gaining access and using the different types of learning space)?*

I analysed my observation field notes and interview transcripts using Braun and Clarke's (2012, p.60) 'six-phase approach to thematic analysis', previously discussed in chapter three.

I start this chapter with a review of the iterative process of thematic analysis, describing how three key themes emerged from the data, and evidence how these themes relate to the research questions (section 4.2). The themes identified were: 1. teachers' use of space, 2. teacher training and, 3. teacher identity. On close examination, I found that all three were, to some degree, shaped by neoliberalism. The influence of neoliberalism emerged from the data through my identification of the influence of economics, the perception of efficiency in the building design, performance management targets and teacher de-professionalisation. In section 4.3, I discuss the influence of neoliberalism in the context of City Green College before focusing on each of the key themes in turn. I continue to use Boys' Spatial Triad as a framework for my research questions but the introduction of neoliberalism from my data causes me to acknowledge its effect on teachers and managers, and I evaluate the use of Lefebvre in the discussions in Chapter 5. In section 4.4, I examine the first theme, which is about the teachers' use of space. The interviews reveal a conflict of opinions regarding how space is used for teaching practice. I also explore the opportunities available for the space to create innovative pedagogy. In section 4.5, I present the findings for the second theme where I examine teacher training. Training in the use of space can enlighten staff about the possibilities of using different spaces for teaching and learning but raises questions about the role of the teacher in these

spaces. In the open and online learning spaces, teachers were expected to alter their teaching approaches to be more facilitators of learning than imparters of knowledge, and at the same time, they were expected to 'police' the behaviour of the students in these spaces. Section 4.6 discusses the influence of space on teacher identity and how altering the type of space used by teachers affects their perception of 'self' as a teacher. The conclusion of the chapter establishes the grounds for the discussion of the findings in the subsequent chapter.

4.2 Thematic analysis

I used the 'six-phase approach to thematic analysis' presented by Braun and Clarke (2012, p.60), to analyse the observations and interview data (as discussed in chapter three). In this section, I review the iterative process of thematic analysis; adding more detail to the outline of the analysis method described in section 3.6.

Phase one of thematic analysis involved familiarisation with the data by reading through the whole set three times. At this stage of the analysis, I assigned codes to each participant to help to identify the data and to identify participants' quotes whilst maintaining confidentiality. The two architects were labelled AC1 and AC2, and the four senior managers were labelled SM1 to SM4. The fifteen teachers within my study have been coded from TC1 to TC15, and the four middle managers were coded MM1 to MM4.

In phase two, the data was coded by selecting words or short phrases which represented the information (see appendix 11). Examining the codes for similarity, eleven themes were developed in phase three from the initial two hundred and twenty-nine codes. Using the guidance provided by Vulliamy and Webb (1992, p.217), I detailed the process of creating themes in phase three, enabling me to relate the developed themes to my research questions.

Vulliamy and Webb (*ibid*) suggested that the analysis of qualitative data should include the following steps:

1. Categorise the data in accordance with the research questions.
2. Examine each category for sub-patterns and trends.
3. Look for similarities and differences.
4. Look for omissions in the data.
5. Define how the data has been categorised and explain this to a colleague.
6. Have a 'rag-tag' category – (see my threats/issues category in appendix 11).
7. Suggest interpretation.

As discussed in Chapter two, the theoretical basis of my research questions uses Boys' (2011) spatial triad, which defines three elements of space: 1.the use of space, 2.the expectation of space to alter practice and, 3.the users' negotiation with the space to meet the expected alteration of practice. This triad helped form my three research questions, presented at the start of this chapter, and formed the framework of the initial analysis of my data. The framework enabled me to organise the identified themes.

During phase three, I organised the raw codes into clusters of related statements under the same theme, before exploring links with the research questions (see the notes in appendix 12). I identified a link between themes and my research questions.

- **Research Question 1: *In which spaces does teaching and learning occur at City Green College?***
Related Themes:
 - Timetabling
 - Curriculum Planning
 - Students

- **Research Question 2: *Is there an expected transformation of teaching through the use of the new learning spaces?***
Related Themes:
 - Building Design
 - Teacher Training

- **Research Question 3: *What issues do teachers face when negotiating with the new learning spaces?***
Related Themes:
 - Staff use of space
 - Threats/Issues
 - Behaviour and disruption
 - Technology

Vulliamy and Webb (1992) asked the researcher to examine any omissions in the data and the key omission in my data is ‘Student Voice’. In Chapter one, I explain that the teacher is the key focus of this research, as I want to identify which spaces the staff of City Green College prefer to use for their classes and the issues this raises. In my conclusion (see section 6.3), I explain that I agree with Massey (1999) and Harvey’s (2005) concept of socially constructed space and that learning spaces are co-created by the teacher and the students. As I explained in section 2.3, I am following Cockburn’s (2005) findings that the teachers initially dictate the use of new learning spaces, especially in the case of the ‘new’ City Green College where teachers had not seen the spaces before or gained confidence in their use. Also, those teachers who have difficulty altering their teaching style from seeing themselves as the transmitter of knowledge to encouraging students to learn more independently may struggle to promote increased student responsibility

for independent learning and will need more time to gain confidence in using the new learning spaces with their students (Blau and Shamir-Inbal, 2017). In addition, my data in chapter 4 shows that the teachers reacted negatively to the move into the new learning spaces. The comments from my participant teachers reflect the findings of Olsen and Guffy (2016) who state that it cannot be expected that teachers enter a new space and alter their pedagogy without guidance, as altering teaching and learning methods takes effort and the reason for this change may not be clear. Studies on students' use of space in schools and colleges have already been carried out before (Peach *et al.*, 2013; Hunt, 2012; Akkoyunlu & Soylu, 2008) and, as I am exploring teachers' perspectives, Student Voice is beyond the scope of this research. My study, however, does contain data regarding the students' interactions with the learning spaces of City Green College because the interviews with the teachers reveal observations of student behaviour within the different spaces.

Vulliamy and Webb's (1992) stage five links with Braun and Clarke's (2012) phase four in which I reviewed the analysis to see if any relationships could allow themes to be merged and to ensure they are not just single coded events. This detailed analysis enabled me to merge the theme termed 'Ownership of Space' into 'Staff Use of Space', as this theme was a better fit for the three codes within the original theme of 'Ownership' (see appendix 11). I also moved the codes under the theme 'Trust Staff' into 'Teacher Training', as the autonomy and subsequent trust of the staff appeared linked to the confidence the middle managers had in their staff, to adapt to the different learning spaces allocated to them. The level of confidence stemmed from

teacher training (or lack of) in using the new learning spaces. Thematic analysis phase five involved the development of definitions for each theme (see appendix 13) to allow for a quality check with a colleague to acknowledge that the themes were valid and linked to this particular research context of City Green College.

Whilst discussing the data with a colleague, during phase five, it became apparent that three key themes influenced the learning spaces used by City Green College teachers threaded throughout the data: 1. teachers' use of space, 2. teacher training and, 3. teacher identity. These are explored in greater depth in the remainder of this chapter. These three themes were all influenced by neoliberalism and economics and efficiency became evident in the comments about the management and utilisation of learning spaces. For example, MM2 stated that:

The open learning space agenda is led by capacity and not by pedagogy.

Smyth *et al.* (2000) explained that neoliberalism influences teachers' perception of their identity through the multiple demands on their time due to the economics of reduced resources and increased pressure to teach more students. This influence could also be seen through what Ball (2003) terms 'dualism' caused by accountability metrics on one hand not capturing all that the teachers do and on the other hand, the metrics altering the teachers practice by causing them to focus on observed teaching, the teaching which is observed by others as part of the monitoring regime, to the detriment of other

duties, such as the administration and pastoral care teachers are expected to carry out.

4.3 Neoliberalism

In section 4.2, I stated that a number of key themes emerged during my data analysis. Comments in interviews regarding economics, targets and performance management led me to suspect it was necessary to investigate the role of the market and economics. I, therefore, turned to the literature on neoliberalism and education. In this section, I define neoliberalism, discuss its role in the context of City Green College and offer examples of data which demonstrate its influence on the creation and use of the learning spaces in City Green College's new building.

Chomsky, (1999) and Peck (2010) suggested that neoliberalism is consists of policies and processes that encourage competition which is free of state control and driven by market forces fuelled by the public cast in the role of consumers. Ball (2013) stated that neoliberalism is predicated on five states of being which interrelate and interdepend: targets, competition, insecurity, displaced politics and economics. Peck and Tickell (2002) added that neoliberalism combines marketisation with the logic of competition, opposing any agenda of increased government spending and tax incentives, and is controlled through funding streams linked to targets that do not allow for failure. Both Ferguson (2009) and Peck and Theodore (2012), however, claim that neoliberalism is complex and is often mistakenly acknowledged as one

package, when in fact it comprises of numerous elements. Peck and Theodore state that part of the complexity of neoliberalism is caused by the UK Government's 'fuzzy-embrace' of private and public-sector collaboration, which is only lightly regulated. City Green College could be perceived as one of these pseudo-private/public sector organisations, arising from the neoliberal ideals of deregulation of FE in 1992 (Lingfield, 2012), when the government released colleges from local authority control to develop as businesses and compete with other educational institutions. Like all educational organisations, however, City Green College is not regulated 'lightly' and is subject to what Hilgers (2012) noted as a deeper reality of state control through performance targets set by the British Government inspection service, OfSTED.

Peck and Theodore (2012) stated that neoliberalism needs to be contextualised and to take into account local variables. In the case of City Green College's new learning spaces, neoliberalism has manifested itself through the influence of economics in the building design and through the performance management of the teachers using the spaces. It can also be identified via teacher de-professionalisation, in the form of first, a lack of investment in training and second, the erosion of teacher identity through the expansion of the teacher's role (Ball, 2003). Using the data gathered during the observations and the interviews with the management and teachers of City Green College, I explore each of these threads of neoliberalism in the next sections of chapter 4 and show how they affected teachers' choice of learning spaces.

Smith (2017) argued that FE has been well funded, claiming that by 2007 New Labour had spent £995 million on developing FE college buildings through the Building Colleges for the Future (BCF) programme (NAO, 2008). However, he argues that FE had become an enactment of neoliberal values in education and was, in fact, part of the neoliberal programme to ensure that it could, first, compete with other educational institutes (colleges, universities and private training providers) to meet market need and economic success, and second, put measures in place to meet the performance targets provided by OfSTED. It would seem from in the writing of Avis (1999, p.246) that 'New Labour's notion of partnership' during its time in government from the mid-1990s till late 2010, was unquestionably accepted by FE colleges, which involved 'market and capitalist social and economic relations'. Even though City Green College's new learning spaces were conceived as part of the BCF programme, senior management were all convinced that the main driver for the move to the new building was not economics or competition, but an opportunity to give teachers new learning spaces to encourage and facilitate the use of innovative pedagogies. SM1 stated that:

It [the development of the new building] was educationally driven ... we were very conscious of how teaching and learning and assessment were developing over time ... mainly through technology. But as learning theory becomes more sophisticated, people like taking different approaches.

SM2 explained that there were issues with the old building leading to the development of the new learning spaces:

The old building was very cellular. There was no open space for socialising or independent learning...it was not a good learning experience for students or the staff. The configuration of the space did not allow teachers to configure the classroom the way they wanted.

SM3 stated:

The old building was not fit for purpose...it was not big enough for the number of students and for the type of learning teachers wanted to do.

However, when discussing the new building as a marketing tool to demonstrate City Green College's status against other educational institutions, MM3 stated that City Green College is not in competition with other colleges:

The market here is convincing those in the local area who have not considered studying at college to enrol.... most students choose the college local to them, and there is little competition with those [colleges] in neighbouring boroughs.

MM3 suggested that there is a need to increase recruitment focused 'widening participation' by recruiting local students who would not have considered college, rather than on competition with other educational suppliers in the area. He went on to state that he was not sure the needs of local students were considered in the design of the new building. He was concerned that large, open plan learning spaces and the focus on independent learning would not suit these learners' needs, as they need more guidance and support than learners attending other universities. In a wider context, Smith (2017) claimed that grand symbolic new buildings like City Green College are designed to represent the state's investment in the FE sector. Even though SM3 said she was 'proud to show visitors' around the new building, Smith argues that the buildings lack substance. He argues that the glass-fronted buildings, with large atriums, lack suitable teaching spaces as the number of classrooms are often reduced and those that remain are made into general teaching rooms not associated with a particular subject.

Smith (2017) also stated that the investment in the I.T. infrastructure does not match that of the building itself and summarises his thoughts by stating:

While BCF policy documents emphasise the importance of 'cutting edge facilities', a strong strand of evidence in the data suggested that the basic environmental requirements for teaching were sometimes absent (Smith, 2017, p863)

SM1 insisted that the new learning environments in City Green College were designed to 'liberate the teachers in the innovative methods they wished to use,' and the architects supported this by stating:

The College has a vision of creating a space that supports teaching and learning innovation and the design of the building focused on that vision (AC2).

The architect also defended the senior managers' statements that City Green College's 'new' building was not developed for economic reasons by stating:

The whole college estate was reduced in area [reducing the number of classrooms] compared with the 'old' college. But, considerations were needed for new teaching and learning ideas, and new technology, which required significant investment (AC2).

However, she was contradicted by the other architect who stated that there was a benefit to the college of reducing staff:

...we successfully delivered the client's vision of a mixed learning environment and [the college] have reported benefits of reduced staffing costs (AC1).

Smith's (2017) statement of 'a lack a substance' is borne out in City Green College, as behind the façade of 'glazed entrance hallways' (p.857) in the new building, is a reduced number of classrooms. This conflict of strategy between creating a building for innovative teaching methods and reducing costs by building fewer classrooms was evident in the form of an undertone of discontent throughout all the teacher interviews. The internal space of the new college was similar in size to the old college building but the college's focus

on decreasing classrooms in the new building, whilst increasing open space and access to online learning space, caused teacher TC14 to comment that:

...this [development of new learning spaces] seems to be driven by college efficiencies rather than teaching and learning.

MM2 agreed that the College vision seems to be based on an economic model and not a pedagogical or student experience model:

The open learning space agenda is led by capacity and not by pedagogy...there is a disconnect between 'them upstairs' and what is happening 'on the shop floor'. There is resistance to acknowledge the research we have... sadly the Bean Counters in charge do not know what is happening on the shop floor.

When discussing the planning of the number of classrooms and open learning spaces, the architects argued that it was hard to focus on the detail of designing such spaces, as no manager could give clear figures on the number of students who would be using the facilities. Post-secondary school students have a choice of educational provision and as MM3 stated, 'we are unable to give accurate student numbers each year until after enrolment'. Without these figures, the architects found it difficult to work out capacity and had to make design assumptions. The architects stated that they worked with a team of senior managers to develop the design of the new college building and admitted that the managers, 'did not challenge the number of classrooms' (AC2). Instead, the architects claimed that the senior managers asked for a design with a mixture of classrooms and open learning spaces to create flexibility within the new learning spaces of City Green College. SM1 explained that:

We took the view that the learning spaces of the future needed to be much more flexible and agile. If you build a building that is going to be around for fifty years, you need to be able to respond. We wanted to design flexibility into it. If you build four walls and a door, it becomes

very inflexible and only used for a narrow range of purposes...so we came up with a notion of different spaces that could be used flexibly.

AC1 explained that the architects, 'did not discuss the space design with the teachers because we assumed that the teachers would give too many varied responses to make clear decisions.' Despite this omission, the architects were proud that they had responded to that vision:

We successfully delivered the client's vision of a varied learning environment. The architects, senior managers and the builders worked collaboratively throughout the project and there were very few issues during the construction process (AC1).

The reduction in classrooms in the new building was designed to be offset by technology-rich open learning spaces and SM2 explained:

There is a change in the power in the classroom. In the old set up where the teacher stands at the front, and the students all face that teacher, the teacher holds the power...given that technology plays a destructive role in this...that ability for students to discover information for themselves changes this [power].

The open learning spaces were designed to encourage group and independent work as SM4 stated:

We wanted to get teachers out of the classroom, away from didactic teaching.

The senior management also hoped that the move to the new building would allow more flexibility in teaching strategies. SM2 stated:

Moving the furniture about [in the classrooms of the old building to enable group work] was a disruptive challenge and took time.

He went on to explain that the new learning spaces enable more flexibility as:

[In the 'new' college building] ... you have an option to conduct activities in the classroom, the option to conduct learning outside of the classroom, in the open learning space. And you have the option of conducting activities online.

The architects' design decisions (and the absence of challenge to them), to reduce the number of classrooms has had a direct impact on curriculum development in the new college building. This became apparent when teachers on courses identified as UK government priority subjects, English and mathematics (DfE, 2017), were given preference to book already scarce classrooms. One middle manager (MM3) explained that he worked with his team to develop an effective plan to use a blend of different learning spaces for his curriculum area. However, he was told that teachers in his team needed to vacate the classrooms and use open learning spaces, as English and maths groups lacked a classroom. Teachers then had to negotiate with each other to vacate rooms for these English and maths sessions:

We are given rooms [booked by the Manager], and then we put the timetables together. However, maths and English had not finished their timetables when we finished ours, which meant we had to do some jiggling around...We worked as a team to use the most appropriate spaces (TC7).

These negotiations between teachers show that it is ultimately they who determine the use of the available spaces. In the next section, I examine how teachers are using the spaces of City Green College and the issues they raised during the interviews.

4.4 Teachers' use of space

In this section, using the data from the observations, I identify the spaces used by teachers in the old building of City Green College (4.4.1) and in the new building (4.4.2). I then present the first issue regarding the change of power in the new learning spaces from teacher-centred learning to student-centred, independent learning (4.4.3). In section 4.4.4, I describe the reduced

number of classrooms in the new building compared to the old building. Finally, in section 4.4.5, I outline the middle managers' concern that the teachers needed to change their 'mindset' when considering using the new learning spaces of City Green College.

4.4.1 Use of space in the old building

I analysed the archived observations conducted in the old City Green College building of the fifteen participating teachers in my study. All of these observations were recorded on the template used for college observations of classroom practice (see appendix 7 and 8). On the observation form for each of the teachers was a space for the observer to define the context in which the teaching is taking place and it was common practice at City Green College to note if the teaching was classroom, workshop or lab-based. All of the archived observations of the fifteen participating teachers recorded the sessions to be taking place in a classroom. The observations noted that the teachers made use of a mix of teaching strategies including didactic teaching and student-centred learning. However, the scope of my research is to note the space that they used and not the different strategies and activities. As these teachers were vocational teachers there is the possibility that some of their teaching would have taken place in a specialist lab or workshop related to their subject area. However, none of these spaces were recorded as being used by the participants in my sample.

4.4.2 Use of space in the new building

I carried out observations on fifteen participating teachers in City Green College's new learning spaces. The observations found that that only two of

those fifteen teachers made use of both classrooms and open learning spaces during the four-hour observation period (see appendix 9 for observation notes). Only one observed teacher used solely the open learning spaces (see appendix 10). Even though I reported earlier in chapter 1 that the senior managers hoped teachers would use a mix of learning spaces to promote independent learning, the observations showed that twelve out of fifteen teachers taught only in classrooms for the duration of the observations.

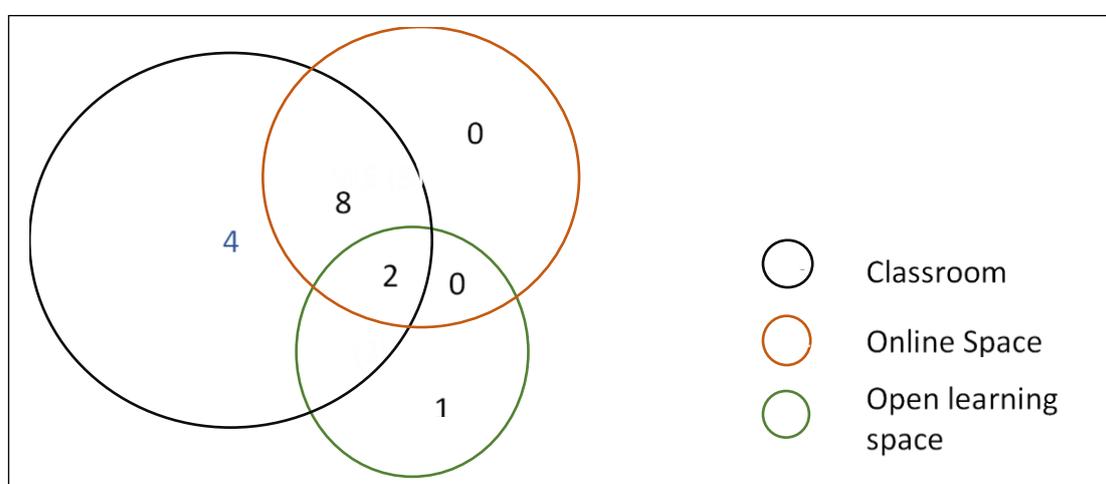


Figure 3: the number of teachers observed using different learning spaces on offer at the new building of City Green College (n=15)

The Venn diagram in figure 3 shows that most of the teachers (fourteen) were observed teaching in a classroom. Eight used online spaces whilst in a classroom, and two teachers made use of classroom, online and open learning spaces. Both of these latter teachers followed the same teaching strategies; spending an hour in a classroom at the start of the session teaching using the material on the whiteboard and facilitating group activities, before moving students into the open learning spaces to carry out independent learning or group work (see appendix 9). Both of these teachers

placed themselves at a table in the centre of the open learning space where their students could find them if they needed support with their work.

Fourteen teachers were observed using a classroom for each student group and eight of these teachers demonstrated that they made use of traditional classrooms and virtual spaces in combination, either using the VLE during the class time or for further work once the session had ended. It is the observation that teachers' continual reliance on a classroom when other learning spaces are available that is at the heart of my research at City Green College.

4.4.3 Balance of power in the learning spaces

Even though the observations showed the teachers using more classrooms than any other space, the senior management at City Green College continued to explain in the research interviews they believed that the new building had changed the balance of use of the learning spaces. The senior managers believed that this change meant that power now lay with the students, as they were able to support their learning with technology for research and online learning. Students were no longer reliant on the teacher knowing everything and being the gatekeeper of knowledge. SM2 stating that technology is disrupting education and enable students to learn from sources other than the teacher:

In the old set up where the teacher stands at the front and the students all face that teacher, the teacher holds the power...given that technology plays a destructive role in this...that ability for students to discover information for themselves changes this.

SM2 also argued that teachers needed to adapt their practice as students

have instant access to the Internet and the teacher is no longer the expert and instead supports learners to find information and question its validity. He explained that:

In the new environment, the learners are empowered to take charge of their learning...If a teacher is in front classroom of a college in 1985 and states that the circumference of the world is x the students will all write that down and believe the teacher. If the teacher does that in 2015, most of the students will get their mobile phones out and say, according to Google you are wrong, according to Bing you are wrong or you're right or whatever. That is what has changed, the ability for students to find information for themselves.

The middle managers supported this viewpoint and could see how the classroom spaces were designed to be used in conjunction with the open and online learning spaces to engage more independent learning. MM2 stated that there were strategies to implement that vision:

Particular inputs of teaching cannot take place in the open learning spaces. One way forward is to use the open learning spaces for students to reflect.

The senior managers believed that there was a shift in power to the students in the use of open and online learning spaces and that this could be implemented in City Green College's new building. However, this practice was not being demonstrated by the teachers, who remained adamant in their interviews that they wanted classrooms.

4.4.4 Number of classrooms

Even though senior managers and middle managers expressed the view that the learning spaces should be used to complement each other, there was still conflict with the teachers who looked for classrooms for their lessons. As discussed in section 4.3, the number of classrooms had been reduced by one-third in the new City Green College building in comparison to the old

building. The teachers felt there were not enough classrooms for the number of timetabled teaching sessions. MM1 and MM3 agreed that the number of classrooms in the new building was limited. However, they also agreed with the senior managers that the teachers need to be more creative in their use of open learning spaces to make better use of the space available. MM3 explained:

New courses will be moving away from classroom-based learning and be more creative...We can be more creative in our use of space if teachers had the time to critically reflect on practice.

In line with the discussion in 4.3, MM2 stated that economic considerations had driven the design and development of the new learning spaces of City Green College. He verbalised that his use of open learning spaces was forced on him because of the lack of classroom space, instead of his use of open learning space resulting from any new and innovative curriculum planning he wished to implement. MM2 stated:

We know that the building was built to a business model to deal with capacity and not pedagogy.

Identifying the focus on the economics of the development of the learning spaces within the college building helps to add an understanding to my study of the concerns of the teachers of the lack of space. It also explains why some may have been requested to teach in open learning spaces when they would have preferred a classroom.

4.4.5 'Mindset' change and the use of learning spaces

Rather than economics being a driver for concern, MM1 stated that the teacher frustrations created from lack of classroom space in the new building

of City Green College came from the insistence of teachers 'trying to use the open learning spaces for traditional teaching.' The change of teaching location from the classroom to the open learning spaces needs to be planned effectively and, as mentioned by MM1, requires teachers to have a different 'mindset'. Instead of repeating teaching strategies that work in the classroom environment, teachers need to identify methods suitable for open learning spaces. However, I noted that whichever learning space the teachers use, they are subject to observation of teaching practice by the college management. These observations monitor their performance against expected targets linked to the UK government inspection (OfSTED) framework. The OfSTED inspection framework uses observation as a tool to measure the quality of teaching and learning, De Lissovoy (2013, p.423) explains that the national inspection framework used by OfSTED trains 'school communities view themselves as fundamentally isolated and forever in competition' with each other in the public domain. Within this context, the middle managers agreed that teaching and learning in the open and online learning spaces was of poor quality. MM1 noted that 'I have observed bad practice' and MM3 stated:

The open learning spaces are chaotic, and you are not able to teach in these spaces.

The interviews with the teachers of City Green College demonstrated that they are aware of OFSTED targets. Conditions in the open learning spaces mitigate against their perceptions of good teaching practice, thus reflecting on their own practice in negative ways. TC10 stated:

...I have had to work hard at developing skills to make learning effective [in the open learning spaces]. I feel more comfortable in a classroom, more like a teacher

When considering the observation of practice, TC8 explained:

Thank God OfSTED observed me in a classroom! Not sure what it would have been like in the open learning spaces.

MM1 stated that to meet the targets set through the observation process, the teachers insist on using teaching techniques they are comfortable with and 'teaching in the open learning spaces using traditional methods that are inappropriate'. When the teaching strategies employed in the open learning spaces are ineffective, the teachers then 'demand to be allocated time in a classroom' (MM3). MM3 was concerned that:

We need to get buy-in from the staff through reflective practice [teacher training]. Otherwise, the staff go back into the classroom and teach the way they know works, even though this may not be the best.

This amplifies the perception of teachers that there are too few classrooms and opposes the senior managers' vision of the new building. Teachers returned to practices the senior managers had hoped they would get away from in the move from the old college building.

4.4.6 Teachers' use of space: Conclusion

In response to my first research question, the data from the observations and the interviews with the staff of City Green College identified that the spaces in which teaching and learning occur include; the classroom, open learning spaces and online. However, the majority of the teachers taught in a classroom and this was in contradiction with the hopes of the senior managers (as discussed in section 4.4.2) The senior managers had envisaged that all three kinds of space would be used in a balanced way to complement each other, in a way that SM1 termed 'innovative'. In answer to my second research question about whether the learning spaces in the

college's new building were being used to transform teaching practice, the senior managers were clear that they hoped the new learning spaces would encourage teachers to alter their teaching methods. However, the middle managers stated that for any transformation of practice to take place the teachers needed to alter their 'mindset'. According to the middle managers, teachers needed to be empowered to make better use of the online and open learning spaces and to do this requires effective teacher training, which will be explored in the next section.

4.5 Teacher training

Middle managers were keen to express that there was an opportunity to use the blend of learning spaces to create a more 'innovative' curriculum that made use of the different learning spaces for technology-driven, independent learning. In this section, I will examine those possibilities while acknowledging that the middle managers considered the need for time and effort required for the teachers to change practice. This leads to a discussion regarding the training needs of the staff (4.5.1) and how training was implemented to support teachers in the use of learning spaces in the new building of City Green College (4.5.2).

4.5.1 Training needs

The middle managers were convinced that there was inadequate time was available to train teachers to go from classrooms they had experienced in the old building of City Green College, to use the different learning spaces in the new building. It was not a lack of resource for training that led to inadequate

training, SM4 stated it was more lack of understanding of how to use the new spaces:

Until we moved into the new building we had no [training plans] and were unable to see what the space looked like.

MM1 added:

...a good chunk of my staff think they need to be in a classroom to be a teacher. A step change is needed to get them from this point to a more blended learning model.

MM3 went on to say:

There was a lack of lead-time to develop pedagogy. We should be exploring the potential of these spaces, with training.

Senior and middle managers expected teachers to embrace the use of a blend of learning spaces, and when they did not, managers observed what they considered as 'bad practice'. SM4 exclaimed that the City Green College lesson observations demonstrated that the teaching was still didactic, whether in the classrooms or open learning spaces of the new building. SM1 added that 'when looking at the observations there was still a lot of instructional teaching'. These observations contrasted with the hope of the senior managers that using a blend of the new learning spaces would lead to staff encouraging students to participate in independent learning. SM4 explained that:

I did not see as much independent study as expected; learners were socialising in the open learning spaces more than learning.

The middle managers also noted that the teaching and learning in the open learning spaces was not effective. MM1 claimed that:

I have observed bad practice in which teaching staff have brought screens around [a space to create] a makeshift classroom [in the open learning spaces], and the staff [teaching inside these spaces] had to raise their voices to be heard. There were students [within these spaces] on headphones and ignoring the session.

MM2 went on to say that he noticed that students were also unhappy about the teaching strategies being used in the open learning spaces:

The reaction from the students [to working in the open learning spaces] is not good. But that may well be because we are trying to teach in the open areas like we teach in the classroom.

MM3 was clear on the importance of teacher training and that City Green College needed to invest resources and time into supporting staff to bridge the gap in their skills from teaching only in a classroom to making use of a blend of learning spaces. He stated:

We need to get buy-in from the staff through reflective practice. Otherwise, the staff go back into the classroom and teach the way they know works, even though this may not be the best.

MM3 was convinced a 'reflective approach' to teaching would engage staff in exploring the new learning spaces, rather than using solely the classroom as they had in the old building.

4.5.2 Implementation of teacher training

SM2 claimed that 'we [senior management] thought we had done sufficient training' in terms of expectations and use of the different learning spaces in the new building of City Green College. SM3 agreed, saying that senior managers thought they had the 'carrots and sticks' in place to encourage staff to use a blend of classroom, open and online learning spaces and that they believed that all the teachers would adapt their practice. However, there was a dramatic change between the kinds of learning spaces in the 'old' building of the college and those spaces in the 'new' building. This substantial change was acknowledged by SM4 who stated:

It was a bold move to try and stand out. [We] tried to lead the way...it was all very organic. You were not restricted to teaching in a classroom...part of the idea was to get people out of the [sic] comfort zones and think about how they can change their teaching.

MM1 raised the concern that there had not been enough training sessions or time to reflect on changes in teaching practice and,

Staff are reluctant as they feel that they do not have the skill to create blended learning. We moved quickly into the new building and there was no time for training.

However, one department within City Green College was lauded as outstanding at blending the learning spaces in the way the senior managers had envisioned. The senior managers touted the recent OfSTED report (OfSTED, 2015) that commented on City Green College's Health and Social Care department's effective use of open learning spaces for teaching and learning as evidence of this good practice. The manager of that department stated that teacher training was key:

We planned training sessions six months before we moved in. For example, we examined teaching sessions and reflected on how else these could be delivered (MM4).

MM4's stated this his staff were proactive in their planning for the learning spaces in the new building.

4.5.3 Teacher training: Conclusion

The senior managers of City Green College thought they had implemented sufficient training to support the staff in the use of the different learning spaces in the new building. However, through observations, the senior and middle managers agreed that they had seen what they considered bad practice; teachers trying to recreate teaching strategies in the open learning spaces that were more suited to the classroom. The middle managers put this

down to lack of investment in training and time for teachers to reflect on practice. My second research question asked:

Is there expected transformation of practice of teaching through the use of the new learning spaces?

The interview data identified that the senior managers did expect the staff to adapt their teaching practice once they were working in the new learning spaces of City Green College. The senior managers expected teachers to use a blend of classrooms, open and online learning spaces to encourage students to engage in more independent learning.

There is more to the use of different learning spaces than just effective teacher training. Even the teachers interviewed that were part of the department which was hailed as a success (TC4 and TC7) stated that they would prefer classrooms over other learning spaces, explaining that:

If I could change one thing, it would be to have no open learning, or at least police it, so it is classroom-ready (TC7).

This suggests that even though training had taken place in the Health and Social Care department, it was not enough to increase confidence and alter the teachers' beliefs of where effective teaching could take place. TC4 went on to say that she used spaces she 'had the most control over' and the 'ability to monitor', and TC4 felt 'comfort' in her classroom. TC4 went on to state that the visual imagery created by the posters on the walls in her classroom supported her learners and when she had to use another classroom or open learning space, it was like 'borrowed space', explaining that:

I feel secure in a classroom, I know what resources are available, the IT works, and there is no need to drag resources in with me.

Another teacher, TC11, supported this discussion by suggesting that:

'I tend to use spaces I can control and monitor, though I do allow learners to choose their own spaces for some activities.'

How teachers identify with different learning spaces needs to be considered seriously. For staff to commit to using the range of learning spaces in the new college, teachers need time to reflect on what their role is in these new learning spaces.

4.6 Teacher identity and use of space

The previous section has shown there was insufficient professional development in the use of the new learning spaces at City Green College, and despite this, in this section, I will present data in 4.6.1 that identified that teaching staff did feel some professional autonomy in their choice of which learning space to use with their learners. However, section 4.6.2 will show that even though teachers feel some autonomy, a conflict of identity emerged amongst teachers that caused a raised level of anxiety, in particular, as a result of teachers being subject to performance management of their teaching practice. I argue in this section, that there are a number of factors that influence the teachers' perceptions of their own identities in the different learning spaces of the new college building. In 4.6.3, I present data that highlights the student's perception of the learning spaces and, in 4.6.4, I disclose teachers' comments from the interviews that demonstrate their considerations of performance management and the learning spaces that they use.

4.6.1 Perceived autonomy

TC13 stated that he felt he had a level of autonomy to alter the spaces in which he taught and said:

In fact, for this afternoon's session, I have managed to book a classroom that is more appropriate.

With that local negotiation in mind, teachers suggested that the college relies on the ability of the staff to make professional judgements on the most appropriate learning spaces to use. TC13 explained that the central timetabling system used by the college to manage the learning space as a resource was not accurate; rooms that were shown on the system as occupied were, in fact, sometimes empty at the stated time. He did feel he was empowered by his manager to walk around the new college building to find a suitable room if he wanted to change the learning space allocated to him and explained that:

My manager does not like me to take questions to him. He sticks to the available resources to solve the problem [centralised timetabling system]. I say to myself that I can spend half an hour to solve the problem. I tell my manager which rooms are available and he says ok...the timetabling system is not accurate. I walk around and find empty classrooms.

In other departments, MM4 claimed he empowered the teachers to work as a team to resolve the issues of locating appropriate space for their sessions.

TC7 stated that 'we had to do some jiggling around...we work as a team to use the most appropriate spaces'.

I argue that the autonomy felt by the teachers is, in fact, a pseudo-autonomy. The teachers at City Green College are being used to resolve problems generated by the centralised timetabling system and had not been asked their

professional pedagogical judgment at the planning stage about which spaces would be best for the learners before the timetables were set. The teachers are in fact having to alter their role from teacher to administrator to identify appropriate spaces for their learners after the timetables have been established and spaces allocated. This lack of respect for the teachers' professionalism is what Gleeson (2013, p.31) calls the 'erosion of professional autonomy'. By not involving teachers, and their professional experience, during curriculum planning and resource allocation, City Green College is challenging teachers' professional autonomy, shifting their identity from that of an educator to that of an administrator.

4.6.2 Teacher identity and the classroom

The scheduling of learning spaces is controlled by the middle managers who are attempting to appease the wishes of the senior management to encourage teachers to use a balance of learning spaces (as discussed in section 4.6.1). However, as highlighted in 4.4.2, teachers actually wish to teach in classrooms and, in the previous section showed how teachers have to negotiate with each other to access the spaces they feel are appropriate for their teaching. The data from the interviews with the teachers suggest that this need for a classroom derives from a belief of what it is to be a teacher. TC10 highlighted that a teacher's identity is based on being in a classroom and went on to say, 'I feel more comfortable in a classroom, more like a teacher'.

Even though TC10 suggests that a classroom is an important element of teacher identity, Hall (2002) stated that identities are never fixed, the elements of identity are fluid and constitute a narrative we tell ourselves 'about the self

in order to know who we are' (Hall, 2002, p.6). TC4 stated as a narrative of his 'self', 'put me out of a classroom environment and I become less comfortable teaching, not like a teacher.' TC9 went focused on the curriculum as the subject of his account about the need to be classroom-based:

...the complexity of the subject does require access to material on the board to support learning. I can't do this in the open learning space.

TC3 built his narrative about needing a classroom around his students' perception of the learning spaces:

The students are coming into college to complete professional qualifications with exams and I worked with the management to make sure the sessions are in the classrooms. I would not be comfortable teaching them in the open learning spaces.

As well as the self-narrative of teaching, in the interviews, the teachers also contradicted SM2's comments in 4.4.3 that the balance of power in the classroom has changed to enable the students to take control of their learning. The teachers still saw the teacher as one who controls the learning and they saw the classroom as a defined space in which to do this. TC11 stated:

I tend to use the learning spaces in which I am comfortable and have control over. I like classrooms, as I can monitor and control what is going on.

Encouraging teachers to let go of this control and feel comfortable in using the other learning spaces in the new building of City Green College would require the 'mindset' change suggested by MM1 in section 4.4.4.

Teachers of City Green College are trying to defend their professionalism and they believe that the classroom is part of what it is to be a professional teacher. I could see evidence of that in TC4's previous quote from 4.5.3:

I feel secure in a classroom, I know what resources were available, the I.T. works, and there was no need to drag resources with me.

TC3 stated that teachers struggled to find, 'identity and place in open and online spaces.' The interviews showed that the teachers tried a number of techniques to protect their own perception of professional identity as a teacher in the open learning spaces, including attempting to recreate a classroom through the arrangement of tables and partitions. TC7 argued that she had to 'grab tables when I can,' to take ownership of open learning areas and create a pseudo-classroom. TC4 agreed that she became 'a bit OCD about it. I use the same open learning space each week.' TC6 agreed that these strategies helped the teachers create a classroom space in the open learning spaces. Rather than use the open learning spaces for independent learning, TC6 gathered the students together to retain control, stating:

I have a small group and teach them around a table within the open learning space.

However, teacher identity is influenced by a number of factors, more than just the physical space for learning. Feather (2014) stated that it is difficult for a teacher to enact their identity, as a teacher can have a number of 'selves' that sometimes comply with management processes and at other times teachers express resistance to management processes. This became apparent at City Green College when the issues of monitoring student behaviour in the open learning spaces was discussed by the teachers in their interviews. The college managers expected teaching staff to take on a change of pedagogical role from teacher to facilitator in the open learning spaces and additionally police the area. This is linked to Ball's (2003) concern of the expansion of the

role of a teacher, discussed in section 4.3. Even though MM3 suggested that 'it was all staff's responsibility to monitor discipline', it was the teachers who patrolled the learning spaces and regularly reminded the students about expected behaviours. This policy is one that the teachers stated they were not comfortable with and one that took up much of their time. TC11 explained that, as he taught in the open learning space he had to work dynamically between the role of teacher and 'college enforcer' (see appendix 10). He was constantly battling against the students becoming distracted while seated in the open learning spaces, due to the constant flow of other students passing near the group. In his interview, his exasperation was clear:

It doesn't work! The open learning zones need to be away from the thoroughfare.

TC7 agreed, stating that she was constantly asking students to behave appropriately in the open learning spaces and:

Students have feet on tables and are socialising in the spaces where I need to teach. I have to use my teacher voice to ask them to stop or move.

Teachers were recorded continually reminding their students to stay on task and not be distracted (see appendix 10). Students were seen to be either on YouTube/Facebook, discussing non-task related subjects with each other, talking to other students on the computers around them or signalling to other students outside of the group being taught. The comments made by the teachers during the interviews seem to suggest that the students were unsure of the purpose of the open learning spaces and this was the cause of much of the disruption.

4.6.3 Students' perception of learning spaces

Students entering FE at City Green College are mainly from secondary schools and their experience of being taught is based around conforming to regulations, being led by the teacher and taught in classrooms. Several of the teachers mentioned that in the new College building there was no culture of learning amongst students within the open learning spaces and students did not know how to behave. When considering the open learning spaces for independent learning TC5 stated:

I do not think our students are mature enough [to work in the open learning spaces independently] and the culture needs to be developed by senior management.

Students came into the college without understanding what possibilities there were to learn independently in the open learning spaces. This has led to conflict between the students and the teachers who have been allocated open learning spaces to teach within, especially as MM3 noted:

Learners are not always aware of where the social area stops and the learning space starts.

Exposing these learners to more independent learning and open learning spaces without proper induction has led to confusion and a lack of understanding amongst the students of what the spaces are for. As mentioned earlier in section 4.4.2, SM4 stated that she:

Did not see as much independent study as expected; learners were socialising in the open learning space more than learning.

That the open learning spaces were being used for socialising and not learning convinced MM3 that the college had failed to achieve key economic targets linked to retention due to students leaving college. He claimed that the discarded rubbish, anti-social behaviour of students who shouted out, and

who played music in the open learning spaces caused other students to withdraw from their courses. MM3 explained:

The open learning spaces are used as a social environment for students. One of the principles of the new building was to integrate the social and learning spaces to enhance learning, but I do not think this is being managed by the college very well. It should be a shared responsibility, but in truth, the senior management needs to communicate a clear strategy on how the spaces should be used. It seems that the open learning spaces are an add-on to [classroom?] learning spaces and not integrated.

TC13 stated that even students on professional courses, which commonly serve mature learners on day release from work, saw the classroom for learning and the open learning spaces for socialising. TC13 explained that, the students 'expected to be 'taught' knowledge towards professional standards in a classroom, and relax in the café.'

4.6.4 Performance management and the teacher

While listening to the interviews, the teachers' thoughts on how the learning spaces impacted on their professional identity were in conflict with the expectations of the senior managers. Senior managers have created performance management tools via observation metrics to measure how teaching is practised across the new learning spaces. The teachers at City Green College are subject to observations by senior managers and OfSTED that measure the quality of their practice. The overall judgment from the OfSTED observations are made public and used to compare the institution with other educational organisations. The data from my interviews demonstrated that the teachers were conscious of these measures and wanted to perform to their best ability, and saw the classroom as the foundation for their good practice. TC9 mentioned:

Even though I am teaching in an open learning space, I prefer a classroom.

TC3 confirms that in the classroom it feels like she is in more control, 'I can walk around and check the learning.' Thus, she is able to demonstrate learner progress; a key metric during the observation of teaching practice.

During her interview, TC10 explained how the classroom is a foundation for her teaching, as it is a space she is familiar with, a stable infrastructure, leaving her to concentrate on pedagogy. It gives her perceived control, as opposed to the open learning spaces that are relatively new and require different skills of classroom management and monitoring of learning. As already discussed in 4.6.2, to negotiate this lack of familiarity and establish a safe place to be observed, teachers at City Green College attempted to turn the open learning spaces into classrooms. I observed TC11 using portable partitions to create a classroom in the open learning spaces (see appendix 10) and TC4 was observed creating a classroom in the open learning spaces by setting up a panoptical table (a central table occupied by the teacher to survey the learners in the surrounding area). She explained in her interview that it was 'exactly like a classroom, just without walls.'

It was significant to note that, during the interviews even the teachers TC4 and TC7 who had been commended on their use of open learning spaces during observations by the college senior management and OfSTED, stated that they would prefer to teach in a classroom. TC7 stated:

If I could change one thing, it would be to have no open learning spaces. Or at least police them so they are classroom ready.

TC4 and TC7 were very proud that OfSTED had confirmed in their report that the teaching in the open learning spaces was good. However, other teachers verbalised their relief that they had been observed by OfSTED teaching in a classroom and not in the open learning spaces where they considered their own teaching to be weaker. TC8 exclaimed:

Thank God OfSTED observed me in a classroom! Not sure what it would have been like in the open learning spaces.

With this pressure of performance management through lesson observations, the middle managers stressed that staff confidence in using a blend of learning spaces is low. MM1 claimed:

Staff are reluctant as they feel that they do not have the skills to create blended learning. We moved quickly into the new building and there was no time for training.

The senior managers hoped that the new college building would alter the teaching practice of the staff to incorporate what SM1 termed 'innovative pedagogy':

...you look at collaborative learning outside of the classroom...with open learning spaces like you have in this building [City Green College], students can break out into smaller groups and find a space they want to work in...Teachers have a choice to conduct activities within the classroom, outside of the classroom and online.

In addition, SM2 went on to say, using online spaces makes learning more transparent and the learner is not waiting for each lesson to be revealed each week, therefore, teaching should no longer take place only in the classroom. He stated we should be empowering the students to choose their own spaces for learning and the senior managers agreed that they trusted the teacher's professionalism to choose the best space for their students. However, as indicated earlier in this chapter, the conflict of teacher identity between the

expectations of the teachers in their narrative of self and what is expected of them in a neoliberalist system of marketisation of education, economic driven ecology and performance management targets has the teachers craving for their defined space and as TC4 stated:

Having my own classroom works well, it feels comfortable.

4.6.5 Teacher identity conclusion

Section 4.6 has identified that in answer to my third research question (how are teachers negotiating with the learning spaces at City Green College?) teachers feel they do have some autonomy in accessing the most appropriate spaces for their learners and are confident that they can negotiate with their peers. However, this autonomy and negotiation of space is evidence that the teachers are attempting to negotiate access to classrooms to avoid teaching in the open learning spaces. The data from my interviews suggest that this could be due to the teachers' own internal image of what it is to be a teacher and their perception of what they think their students expect of learning spaces. Part of the preference for a classroom is also due to teachers believing they needed the security and familiarity of a classroom when pressured with performance management observations of practice. The teachers felt that they need a classroom to create the foundations of their good practice and that the open learning spaces have too many variables, such as noise, different styles of soft furniture and other students wandering through. These obstacles prevent teachers from focusing on meeting performance management targets.

4.7 Conclusion

The senior management of City Green College stated that they had confidence in the professionalism of their staff to choose the best spaces for their students. SM1 stated:

Teachers have a choice to conduct activities within the classroom, outside of the classroom and online.

However, the majority of teachers continued to teach within a classroom, albeit supported by the online learning spaces available through the VLE. The interviews with the senior managers identified that they did have a vision of the learning spaces being blended effectively to allow teachers to use more innovative pedagogy. However, the senior managers admitted that this was not being implemented in the way that they had hoped and that more effective training was needed to support teachers.

The interviews with the middle managers evidenced that they were keen to develop the teachers' practice, but were concerned by the lack of training or investment in time to develop new curricula to support teachers' work in the new learning spaces. They stressed that they trusted the professionalism of their staff to negotiate with each other to identify and use the most appropriate space for their learners. However, the neoliberalist agendas of marketisation of education and de-professionalisation came through strongly in the interviews with the middle managers and the teachers. Both groups expressed a desire to teach in a classroom and saw the classroom space as a foundation to achieve their performance management targets and to identify with their subject and as a teacher (see TC4's comments in 4.5.3).

Teachers felt that they had received no guidance regarding how the different learning spaces could be used and their expected role within these spaces. The middle managers had stated that moving from using a classroom to a blend of learning spaces involved a significant 'mindset' change, as the identity of a teacher had moved from a person at the front of a classroom, to a facilitator and enforcer within the open and online learning spaces. SM4 stated that this transition had been difficult to visualise, as the teachers did not know what teaching and learning would look like in the new spaces and they expected the teachers to 'get on with it' (SM3) and find solutions. If they were to be measured through their performance, the teachers felt that they needed a classroom. In a classroom, they felt that they were in control and could monitor the learning and work towards the accountability targets against which their practice was going to be measured. Their perceptions of education and achieving positive results against prescribed criteria and targets made them feel like a teacher. Altering the space in which teaching and learning takes place affects the confidence of the teacher (see 4.6.4) and in addition, TC5 stated 'staff anxiety is constantly challenged by the I.T.' and TC8 added:

'I do not think the middle managers understand the possibilities of digital learning. Teachers do not have time to support online learning'

The data from my observations and interviews goes part way to address my research questions:

1. *In which spaces does teaching and learning occur at City Green College's new building?*
2. *Is there an expected transformation of teaching through the use of the new learning spaces?*
3. *What issues do teachers face when negotiating with the new learning spaces (gaining access and using the different types of learning space)?*

Exploring the observation data for question one identified that the majority of the teachers were using classrooms and most were using online spaces to support teaching and learning. However, only one taught solely in the open learning spaces and only two made use of a blend of the three spaces. This is in conflict with the interview responses by the senior managers who stated that they had a vision of the new learning spaces in City Green College being used to complement each other (see 4.4.3) and allow teachers to 'be more innovative with pedagogy' and therefore transforming teaching from didactic to a more independent learning. In answer to my third research question, teachers stated in their interviews that they had to adapt the spaces, often making the open learning spaces a representation of a classroom (see 4.6.1). In their interviews, the teachers described that they had a perception empowerment to be able to negotiate with their peers to access the spaces they felt most appropriate for their learners. However, this negotiation was used to attempt to access classrooms in preference to the open learning spaces they had been originally timetabled to use.

Chapter five discusses the role the theoretical framework played in the analysis of my findings. It also explores in more detail the connections between the data in my study and literature written about new college buildings and learning spaces. An examination of the themes of teachers' use of space, teacher training and teacher identity, underpinned by the effects of neoliberalism, help to establish more substantial answers to my research questions.

Chapter 5: Discussion

5.1 Introduction

This chapter gathers the key findings from the literature review and the analysis of my observations and interviews. The chapter is organised into the following structure; Section 5.2 discusses the theoretical framework used to develop the research questions and the initial exploration of my findings. I explain how the results of my data altered the framework I used during the analysis and how the influence of neoliberalism emerging from my findings caused me to view my data from another perspective. In section 5.3, I discuss this influence on the design and use of learning spaces in FE. In sections 5.4, 5.5 and 5.6 I discuss how teachers use the learning spaces in City Green College, the effect of training on this use, and how teacher identity is affected by the use of these different learning spaces. Section 5.7 offers a summary and conclusion of the topics discussed in the chapter.

5.2 Theoretical framework - Boys' Spatial Triad

5.2.1 Boys' Spatial Triad in my research

In 2012, City Green College opened a new building initiated by the UK government's Building Colleges for the Future (BCF) programme. The old college building was knocked down and replaced by a structure containing learning spaces described by one of the senior managers as 'flexible', 'encouraging innovative pedagogy' and 'to last fifty years' (see 4.3). In my case study, I wanted to investigate how teachers at City Green College use the learning spaces offered in the new college building and I was also keen to

find out if the senior managers of the college anticipated that the new learning spaces would alter teaching practice. In my literature review, and to frame the initial analysis of my data, I used Boys' spatial triad (2011) (see section 3.8) and in section 2.8, I describe how Boys had adapted her triad from Lefebvre's (1991) work. My findings, however, led me to re-visit and re-examine my data through the lens of Lefebvre's spatial triad. In this chapter, I explain how during my analysis I discovered, unexpectedly, the influence of neoliberalism on the design and use of the new learning spaces at City Green College. This led me to realise that Boys' technical approach to studying space from a non-political viewpoint was not sufficient to capture the complex politics at work in the relationship between social activity and space. Even though Lefebvre considered space from a Marxist standpoint rather than the neoliberal influence that was emerging from my data, his consideration of the political impact was closer to my findings.

5.2.2 Theoretical framework and the study of learning spaces

Before describing how I used Boys' spatial triad, it is important to review how existing studies on space influenced Boys' thinking. This will establish how the examination of my findings led me to alter the framework I used for my data analysis. Harvey (1973) explained that space is more than a geometric shape and an empty vessel. He suggested that space was dynamic and needed to be described in the context in which it was currently being used and that this could change over time. Lefebvre also saw more to space than an area surrounded by a defined boundary and considered the people and social interactions within the space as critical, stating:

Physical space has no reality without the energy deployed within it (1991, p.13).

Harvey (1973) explained that architecture is a visual illusion of the culture which it is trying to represent. The building may seem a functional use of an area, but it is built around social constructs of those people using that space. He gives the example of a church to explain this. The church is a large space containing pews for the congregation, a lectern for the speaker and the altar as a focal point representing god. However, the placement of these items within the space is due to more than just function. The pews face a raised lectern, which itself is next to the altar to demonstrate where the power lies and the position of the pastor in relation to God. Similarly, the choir is placed closer to the altar than the congregation to signify that they are closer to god. In the case of City Green College, the architects have reduced the number of classrooms and created large open-plan learning spaces to replace the traditional classrooms in which the teacher dominates the enclosed space (usually from the front, similar to the example of pastor in the church). The social construction of space in the new college building focuses on social learning, increasing the learning that is independent of the teacher and dissipating the power of the teacher, as discussed by senior manager SM3 in 4.3.

Harvey's views carried a distinctive Marxist perspective, as can be seen in his church analogy. There is a clear dominant, elevated position for the elite (the pastor and choir) and a space at a lower elevation for those with less social/religious status, who are often the working class (i.e. the congregation). The Marxist viewpoint, of those in power and those who are not, was also key

to Lefebvre's work. However, he was keen to get away from this dualism, and he suggested that space also included a place where the working class could rebel against the constraints imposed by the elite. To describe his vision of space, Lefebvre created a spatial triad (see 2.4) that defines space through three aspects: 1.the routine of users (tasks carried out in the space by the workers), 2.the perceptions of the space through design (design created by the elite to signpost the use of the space) and, 3.perceived space of those that use it (the workers using their own language and signs to engage with the space in the way they prefer). Smith (1990) agreed with Harvey and Lefebvre's Marxist approach to describe space as a visualisation of the design of the elite and an area for the working class to operate, adding that capitalism encourages the elite to design space as a commodity. Smith (ibid) adds that commodities are seen as something to be traded between one place and another, and now capitalism is even commodifying those places that are the starting and end points of these transactions. In the case of education, for example, the spaces in which learning happens are also commodities.

Commodification could be seen at City Green College through the management demonstrating economic efficiency via room utilisation figures and building costs, and designing multi-use flexible areas that can be used for any curriculum area, as well as being hired out for external, income-generating events. At City Green College, the open learning spaces were hired out for exhibitions, network events and the BBC to film *Children in Need* to provide an additional revenue stream. However, Smith (1990) noted that

there is a contradiction in the commodification of space between market forces and innovation. Educational organisations attempt to innovate, be different and to stand out in a crowded marketplace, as articulated by SM1 and AC2 in section 4.3, is restricted by the number of firms hired to carry out the building work and Smith (2017) suggested that all colleges end up looking the same with large atriums, large open learning spaces and fewer classrooms. The need to be able to compare the performance of staff in one college against others influences the building design and compromises innovation as they copy what is considered good practice.

The conflict in the use of space to innovate practice, yet, maintain a set of rules relating to how it can be described and used, led Soja (1996) to move the discussion on space from a Marxist to a post-modern perspective. He explained that, as opposed to attempts to create a clear definition of space by those who are in control of the space and those being controlled in the use of space, there is no common language, text or discourse to capture the meaning of space. Thus, attempting to attach an explanation of space from two viewpoints is not enough. Soja (1996) appreciated Lefebvre's exploration of space as a triad (described in 2.3) and developed his own triad calling the third element, 'Thirdspace'. 'Thirdspace...is another way of understanding and acting to change the spatiality of human life' (Soja, 1996, p.10). Thirdspace is a place where those who use the space can re-think its purpose and reconstruct its use by altering the language and semiotics used to describe it. For example, Soja discusses the ever-changing use of the spaces in Los Angeles, including how the spaces of the University of California have been

deconstructed and repurposed by users. This is similar to Lefebvre's triad element when he refers to 'representations of space,' in which the users find a way to rebel against the vision and symbolism of space held by the elite classes. However, Soja's 'Thirdspace' is driven less by Marxist ideology and more a considered post-modern re-conceptualisation of the space in which the users decide how the space is used contrary to the expectation of the designers of the space.

Even though Boys claimed to have developed her triad from Lefebvre's work, her attempt to create a more pragmatic triad to define space, distancing herself from Marxism, is closer to Soja's (1996) post-modern triad. Soja was explicit in his claim that space is complex and requires an examination through deconstruction. In contrast, Boys (2011) is modernist in her approach, attempting to define space technically through a set of empirical observations and to find solutions as to how the configuration of space can be used to alter the routines of the users. This modernist viewpoint, which suggests there exist technical rules to identify a solution to a problem, initially appealed to me. I started out on my research journey looking for the clear technical answer to why teachers are not using all the different kinds of space available and why they were trying to reconstruct the traditional classroom in the new building. I assumed that the management was timetabling teachers into the classrooms to enable them to measure the teachers' time against the contracted hours, rather than allowing the teachers the freedom to make pedagogical judgments on the appropriate spaces for their learners. I also considered that the senior managers of City Green College intended the configuration of the new

learning space to alter the practice of the teachers working within, so I needed an approach that would allow me to examine how teachers use the space and any attempts made to alter this. Boys' (2011) spatial triad suggested that space was made up of: 1.ordinary routines, 2.attempts to transform these ordinary routines and, 3.participants' perceptions of *relationships to and negotiations with* space to transform the ordinary routines. This combination of elements segued neatly with my research objectives. Using all three elements of Boys' spatial triad, I developed my research questions;

1. *In which spaces does teaching and learning occur at City Green College's new building?*
2. *Is there an expected transformation of teaching through the use of the new learning spaces?*
3. *What issues do teachers face when negotiating with the new learning spaces (gaining access and using the different types of learning space)?*

Boys' spatial triad helped to structure my research, however, once I began my analysis Boys' triad raised certain issues that are explored in the next section.

5.2.3 Critique of Boys' Spatial Triad

As mentioned in section 5.2.1, Boys' spatial triad was derived from Lefebvre's work to depoliticise the development of the routine use of space and to make the study of space more pragmatic. I discussed in my literature review (2.4), however, that Boys' triad left little scope to explore the implications of wider economic and political forces in the creation of new learning spaces. I initially thought my study would explore teachers' viewpoints of a conflict between the expectations of the senior managers who wanted staff to use the new learning spaces through 'innovative pedagogy' (SM1) and of the middle managers' need to timetable teachers into classrooms to ensure that they could monitor

contact time between teachers and students. This hypothesis seemed to suit the use of Boys' framework. However, the themes emerging from my observations and interviews indicated evidence of a powerful underlying political agenda influencing the design, development and use of the new learning spaces.

Throughout my interviews described in chapter 4, elements of neoliberalism including market forces, competition and economics, became evident in influencing the design of the spaces at City Green College and management's expectations of teacher performance. In section 4.3, AC1 stated:

...we successfully delivered the client's vision of a mixed learning environment and [the college] have reported benefits of reduced staffing costs.

Also, in section 4.5.1 SM1 stated that there was a lack of innovative pedagogy and that:

When looking at the [performance management] observations, there was still a lot of instructional teaching.

Boys may have been too optimistic to broaden her triad by removing the Marxist aspects of a controlling elite and defining the use of space as a democratic process between the management and users of space to transform practice. I too was naïve in not initially considering the political angle in my initial research planning. Boys (2011) admitted that rather than automatically seeing decision-makers prescribing societal norms on the use of space and 'ordinary' people challenging these, as Lefebvre did, she saw all stakeholders as having a part in negotiating the use of space. In her triad, instead of seeing the Designers or Managers imposing a vision on the teachers, she saw all stakeholders supporting each other in the use of space

to make the vision of the managers a success. Boys (ibid) also explained that the users of the space consulted and negotiated with the decision-makers to make sense of the space. My data identified that the decision-makers of City Green College did not consult with users, as evidenced through the architects' statement in section 4.3 that they did not discuss the designs with the teachers for fear of receiving too much contradictory feedback. The decision-makers tried to impose their ideal and vision of the use of the new learning spaces on the teachers and this resulted in those teachers, who had not been consulted about the design, having to waste time and experience tensions in order to use the space. Even though I based the original development of my research questions on Boys' Triad, once I began to analyse my data and identify emerging themes the teachers' lack of consultation during architectural design and curriculum planning, and having to negotiate their own way through the new learning spaces, meant Lefebvre's Triad became a more appropriate framework.

In my study, neoliberalism influenced the 'elite', i.e. City Green's senior managers and architects, as they strived to achieve economic targets to become a profitable organisation and improve teachers' performance targets against national standards of teaching and learning. There were three ways in which elements of neoliberalism arose in my data, presented in section 4.3. The first was competition, as the senior managers described that City Green College was in competition with other local colleges and universities, or at least in competition with other educational organisations to encourage the enrolment of the local population as described by MM3 (see section 4.3). The

second was economics, demonstrated through the description of the economic benefits of the new learning spaces, through the reduction of estate and staff costs, by the City Green senior management and architects. To meet these economic targets City Green College reduced the staffing numbers in the new building through a round of redundancies of administration and management staff, and reduced the number of classrooms (see 4.3). The third element was market forces, presented in the data through the senior managers' comments that the new learning spaces will attract more learners. This encouraged the senior managers to use the new learning spaces to impose a vision of education on the teachers rather than introduce the democratic negotiation of the use of space between decision-makers and users as suggested by Boys. The teachers were left to work together to adapt to the new learning spaces to try to make them appropriate for themselves and their learners. The senior managers stated in section 4.3 that they wanted the space to encourage:

...teachers out of the classroom, away from didactic teaching (SM4)

And the teachers said in section 4.6:

We had to do some jiggling around...we work as a team to use the most appropriate spaces (TC7)

My study places more emphasis on political ideology than is the case in Boys' triad. My findings of the developments and use of space by teachers offer a more contemporary interpretation than Lefebvre's original Marxist approach (see section 2.3), as I explored learning spaces through the lens of neoliberalism. Only by considering the political perspective was I able to address my original research questions (see chapter 6).

5.3 Learning spaces and neoliberalism

5.3.1 Neoliberalism

In section of 4.3 of my thesis, I explain that neoliberalism is defined by Chomsky (1999) and Peck (2010) as the policies and processes that promote market forces and I presented evidence of how neoliberalism emerged from my data. In this section, I outline neoliberalism further and offer an analysis of my data to explain the impact of neoliberalism on learning spaces and Further Education. Peck and Tickell (2002) argued that neoliberalism is a combination of market force logics of competition and opposition to increased government spending. They also state that these agendas are often linked to funding which is dependent on performance targets, as I discussed in chapter two. Ferguson (2009) believed that these targets lead to an enrichment of resources of those in power while increasing the inequality and insecurity of those not in power. Peck and Theodore (2012) added a complaint that there is a significant divide over the definitions of neoliberalism and that developing a competitive market, unrealistic economic performance and exploitation by the elite are all unwanted side-effects. Ferguson (2009) and Peck and Theodore (2012) agreed that neoliberalism is complex and that it needs to be considered in context. Therefore, this section of the chapter will examine neoliberalism in FE through the local context of City Green College. Smith (2017) noted that Lefebvre saw a connection between space and ideology and stated that they were indistinguishable and, with this in mind, I discuss the influence of neoliberalism on the design decisions made in the development of the new City Green College building spaces. Later sections in this chapter will discuss the effects of neoliberalism on teacher

professionalism and teacher identity, and this will relate to the responses to my research questions.

5.3.2 Neoliberalism and Further Education

Neoliberalism in education manifests itself through competition and marketisation of the school/college brand (visualised in league tables and public performance reports). By using standardised testing and performance monitoring (by OfSTED), the UK government produces data that shows how the performance of one school or college compares to another. Within such a free market model of supply and demand, Ball *et al.* (1996) stated that parents act as consumers by using the data to identify the best schools for their children. Headteachers and College Principals use this data to promote their brand to parents and/or to set performance targets for their teachers to raise standards and therefore improve institutional reputation. Ferguson (2009) warned that the free market model of treating education as a business leads to a reduction of state control and an increase in privatisation, which was seen through the deregulation of FE Colleges from local authority control in 1992 (Lingfield, 2012). The social inequalities in FE also deepened as the Rowntree Foundation in 1995 claimed that the market forces served to support the interests of the middle class (Avis, 1999, p. 246). The increased focus on national UK government targets of economic success and creating a labour force that adds value to the production process (Avis, 1999, p.248) could be detrimental to the important role that colleges play, as highlighted by Thomas (2001), in overcoming social exclusion and developing social capital. This is

because college management prioritises funding, resources and staff performance over the social development of learners.

Peck and Theodore (2012) stated that neoliberalism is a 'fuzzy-embrace' (p. 179) of private and public-sector collaboration which is only lightly regulated. City Green College is representative of organisations in the FE sector that are pseudo-private/public organisations. The deregulation of FE colleges in 1992 (Lingfield, 2012) saw the management and administration of institutions taken out of local authority control and established as their own trading enterprise. De Lissovoy (2013), therefore, argues that by using neoliberal ideologies to privatise education, institutes of learning moved from places where people think, to a place where people think 'for a purpose' (p. 426) and learning thereby became a commodity. Instead of learning to gain knowledge, Simmons (2010) argues that colleges prioritise education for the labour market by training learners on competency-based courses for a specific vocational setting, e.g. hairdressing. I would also argue that FE Colleges are far from the suggestion by Peck and Theodore (2012) that private/public sector organisations are lightly regulated and, like all educational establishments in England today, colleges are highly regulated by auditors such as OfSTED. Hilgers (2012), notes that because neoliberalism strives for unrealistic economic and performance targets this fact, together with OfSTED, leads to a deeper reality of state control. It may be difficult for City Green College's management to meet the expected standards of good teaching set by the government while trying to innovate and stand-out from competitors. Apple (2004) stated that management and teachers are spending more time

and energy on developing the public image of the educational institute than on curriculum development. Even though only one middle manager in my study mentioned OfSTED directly when discussing the use of the new learning spaces at City Green College (appendix 11), the influence of performance management was evident in the interviews with the teachers (see section 4.4.5), as they commented that their teaching practice was continually observed. I discuss this later in this chapter.

5.3.2 Critique of Building Colleges of the Future (BCF) programme

Before I discuss the way in which teachers use the learning spaces of City Green College, the origins of the development of the new building and the influence of neoliberalism on this should be explored. In section 2.4, I explained how City Green College's old building had been built in 1974 and, like a lot of FE estate across the country, needed upgrading. In 2007, the UK government established its BCF programme to fund the rebuilding of FE colleges. The programme promised to:

...result in cutting-edge facilities – it will also ensure that our workforce has the skills it needs to succeed in a rapidly changing world' (Learning and Skills Council (LSC), 2008, p.1).

The LSC hoped that this state-funded, capital investment, in college buildings would lead to economic growth, increased employment rates and wealth generation. However, Smith (2017) argued that this capital investment became an actualisation of neoliberal values in education. Smith (*ibid*) claimed that the BCF is part of a greater programme of educational decisions at government level being led by the evaluation of economic gain rather than educational judgement. For example, the architecture of the building which uses glass facades and open spaces is part of the marketisation of education

as it adds to the allure of the college for potential students, therefore, increasing recruitment and increasing funding.

Thomas (2010) suggested that a college space defines its vision of education by becoming a physical manifestation of the senior managers' principles regarding teaching and learning. The senior managers in my study wanted City Green College to 'lead the way and stand out from others' (SM4), creating learning spaces that were 'flexible and to last fifty years' (SM1), and allowing teachers to use 'innovative pedagogy' (SM1). The managers were convinced by this vision and, even after the funding for the BCF programme was withdrawn during the global economic crisis of 2008, City Green College went ahead with its new college building and opened its doors in 2015. However, in the interviews with the four senior managers of the college (section 4.3) they did not define what was meant by 'flexible spaces' or how they knew the building would last for fifty years, and they had not considered any research that demonstrated a link between specific kinds of learning spaces and improved learning (Woolner *et al.*, 2007).

The open-plan learning environment was in favour in the USA during the early part of the century as optimum for independent learning (Saltmarsh *et al.*, 2015), a topic I return to in 5.4.2 and 5.5. However, distraction and noise reduced its appeal, but this did not stop it appearing as part of the design in colleges in the UK as part of the BCF programme. Saltmarsh *et al.* (2015) argued that theories of learning state that a well-structured learning environment was a pre-requisite of learning. Smith (2017) countered this by

stating that existing research did not substantiate the BCF policy of creating new learning environments to enhance learning.

The senior managers claimed that the new learning environments would help the college 'stand out' (SM4) against competition with other universities and colleges (see 4.3). This claim did not convince the middle managers who stated in the interviews that the education marketplace of City Green did not include other colleges and universities, local and/or national, in fact, MM3 stated in section 4.3:

The market here [for City Green College] is convincing those in the local area who have not studied at college to enrol... most students choose the college locally to them, and there is little competition with those [colleges] in neighbouring boroughs.

The senior managers' vision of the new building for City Green College reinforced Ball's (2003) concern that education is now seen as a business. However, if there was a hope by the management that the new learning environment would improve academic outcomes, Rogers and Vertovec (1995) warn us that we over-estimate the role that physical space plays in the activities that occur in the space. Their study showed that, in comparison to other factors, the environment did not affect academic performance. Previous research by Rutter *et al.* (1979) had also shown that the physical environment has little effect on education results.

Smith (2017) critiqued the BCF programme in his study, stating that there was little proof that a new college building would improve results but admitted that in the colleges he studied, the learners benefited from carefully designed social spaces. However, City Green College did not gain this benefit, as the

teachers and the middle managers all noted that the spaces were ill-defined and the social spaces overlapped with the learning spaces (see 4.6.2). The senior managers at the College had defined the learning spaces as a triad of 'classroom, open and online learning spaces' (SM2), agreeing with the definition offered by Alterator and Deed (2013) that an open learning space appeared like a non-school space and was bigger than a classroom. However, the senior management and architects failed to make clear the areas where the students could socialise (see 4.6). The comments of the teachers I interviewed were similar to the participants in Smith's (2017) study. For example, Lisa-Jay, a student teacher, was critical of the open learning spaces, stating that there needed to be some control within these spaces, rather than encouraging socialising, otherwise it would lead to disruption. In section 4.6.2, the teachers in my study also highlighted numerous issues when using the open learning spaces, such as noise, litter and the constant flow of other students passing near groups that were learning. This was a manifestation of Deed and Lesko's (2015) argument that the enclosed space of a classroom contained a complex mixture of classroom management, movement and interaction that becomes even more complex when taken out into the open learning spaces.

Saltmarsh *et al.* (2015) highlighted that there had been little research into teacher's day-to-day use of learning spaces and this lack of research led to the architects of City Green College making assumptions about the learning space design and how the spaces could be used. The design of the college became influenced by 'architectural determinism' (Woolner *et al.*, 2007), a

development led by the architects rather than the users. In section 4.3, the architects in my study admitted that the senior management team did not challenge their designs and the architects excluded consultation with teachers regarding the design of the new learning spaces at City Green College to avoid what they perceived would be unnecessary confusion (see 4.3). As Woolner *et al.* (2007) noted, this leaves teachers feeling that they do not own the space and leads them to be forced to 'cope' with the environment rather than using it creatively to enhance teaching and learning. Despite the new learning spaces offering possibilities for a new pedagogy, Alterator and Deed (2013) added that traditions are a powerful influence on teachers and if they are feeling overwhelmed and lack control they will revert to practices that are more conventional. In the next section, I will discuss the teachers' use of the new learning spaces at City Green College and how I understand elements of neoliberalism affected their embrace of the opportunities offered by the new learning spaces.

5.4 Teachers' use of space

5.4.1 Use of space introduction

In this section, I discuss the conflict between the way in which the senior managers had visualised the use of space and how the teachers' in reality use the learning spaces in City Green College's new building. Alterator and Deed (2013) agreed with Lefebvre's work that users of space would work together to develop a social understanding of how space should be used. However, as mentioned in the previous section, teachers' previous knowledge

and experience of teaching activities is a powerful influence on how learning spaces are used.

5.4.2 City Green College senior managers' vision

During my interviews with the senior managers (see section 4.3) they all agreed that they wanted to create flexible learning spaces that allowed teaching staff to be able to 'innovate pedagogy' (SM1), creating spaces that allowed for more independent learning. This was supported by the archived observations (see section 4.4.1) of teaching practice in the old building, which demonstrated that teachers were only using classroom spaces. Neil and Etheridge (2008), and DeGregor (2011) stated that using more flexible learning spaces allows for a more independent learning approach and City Green's management's pursuit of these types of space showed that they are demonstrating their commitment to educational improvement. Studies by DeGregor (*ibid*) and Neil and Etheridge (*ibid*) demonstrated that open learning spaces improved engagement, collaboration and flexibility. Both studies, however, were only concerned with small-scale open learning spaces within a classroom and not open learning spaces on the scale of City Green College.

Smith (2017) identified in his study that the open learning spaces in colleges were seen as social learning spaces and utilising these for teaching and learning would remove the need to rely on the traditional classroom approach. This agrees with City Green senior managers' vision (see section 4.4.3) that to allow teachers to select from a range of spaces to innovate pedagogy. However, in Smith's study, the participants argued that open learning spaces

had a vocational bias due to their curriculum focus on more collaborative learning, in detriment to courses that were more suited to individual learning. This observation applies to City Green College, as it is an FE college with a large portfolio of occupation based courses and all of the courses taught by my participating teachers were vocational. The BCF programme was intended to create new college buildings and support the development of collaborative learning through improvements in teaching strategies in spaces that enabled independent learning, supported by embedded technology. The senior managers at City Green College certainly agreed with this concept and worked with the architects to develop spaces to match this remit. However, as warned by Cooper (1981), the architects did not use the 'form follows function' ideal through which the space design is based on the behaviours of the users, in this case, the teachers. Instead, the architects claimed they lacked the detail required to plan for the expectations of the users and made assumptions about the learning space design (see section 4.3). AC1 stated that the architects did not discuss the space design with the teachers because they assumed that the teachers would give too many varied responses. Instead, they worked solely with the senior managers of the college who only gave them an outline of their expectations for the new learning spaces. The senior managers' expectations of how teachers could use the different spaces were ill-defined. SM1 stated the senior managers had a vision of the new learning spaces at City Green College and saw the open and online learning spaces as places for collaboration, independent and social learning. However, SM1 expected the teachers to find the most suitable strategies. This lack of

definition led to many issues, which stemmed from limited training and challenges to teacher identity and this is discussed later in this chapter.

5.4.3 Teacher's use of learning spaces

In sections 2.3 and 2.4 of my literature review, I discussed what constituted space and learning spaces. In my study, I concluded that a learning space is any physical or virtual space that has been constructed by or occupied by the teacher for the function of learning. In this section, I will explore the issues teachers face when using the new learning spaces of City Green College and the strategies adopted by the teachers to use the space to support their learners; acknowledging Scollon and Scollon's (2003) observation that teachers relied on their memories of their own learning experiences as students in school and of their teaching experiences. In the case of City Green College, teachers used tried-and-tested, yet inappropriate, classroom techniques in the new open learning spaces.

5.4.3.1 Issues using learning spaces at City Green College

Smith (2017) highlighted the positive aspects of using open learning spaces, for example, increasing social learning (p.11) and JISC (2015, p.29) advocated the use of online learning spaces, citing the case study of Telford College. Teachers interviewed in my study, however, were unanimous in their desire to teach in a classroom (see 4.4.2 and 4.4.5). The promises of the senior managers of City Green College, the LSC (2008) and Deed and Lesko (2015) that the blend of learning spaces would allow for innovative pedagogy and would enable learning to happen anywhere, failed to win over the

teachers. All fifteen of the teachers interviewed for my study wanted a classroom to teach in and the only reason they were teaching in the open learning spaces was due to the scarcity of classrooms (see 4.3).

In one of Daniels *et al's.* (2017) schools, teachers were frustrated with the open learning spaces and demanded classrooms. The teachers in the study complained that the open learning spaces were not fit for purpose, as there was too much background noise and distraction, and this led to the teachers being unable to support learning. Daniels *et al.* reasoned that lack of training for the teachers was the cause (discussed further in section 5.5) and to resolve this issue the Headteacher in their study built walls, turning the open learning spaces into more classrooms. Daniel *et al's* study did not consider the amplification effect of a large atrium in an area the size of City Green College, yet, my findings echoed Daniel's data, as all of the teachers I interviewed complained about the noise level and the distractions in the open learning spaces of the college. In section 4.6.2, my participating teachers stated that the noise levels raised their anxieties about controlling the space for effective learning, with TC11 saying:

It doesn't work; the open learning zones need to be away from the thoroughfare [due to the noise].

Alterator and Deed (2013) added that students struggle to hear the teacher in the open learning spaces and that the teachers are distracted and struggle to communicate.

Daniels *et al.* (2017) researched ten participating schools with new buildings and explained that those schools making successful use of open learning

spaces supported students in the transition to these spaces. The same initiative was suggested by one of the middle managers in my study. MM3, in section 4.6.3, stated that he was concerned that the students were moving from the more controlled spaces of secondary school and into a more liberal blend of spaces at City Green College without understanding their planned use. This led to students socialising more than learning and being noisy in the open learning spaces. In his interview, MM3 suggested that the students and the staff should work together to develop an understanding of how the spaces in the college should be used and therefore create what Alterator and Deed (2013) stated is the concept of 'social cohesion' in the development of the use of space.

5.4.3.2 Teaching strategies used in the learning spaces of City Green College

Thomas (2010) argued that learning spaces are not defined by the social group that inhabits space, but are defined by the teaching strategies that are used. Because of this, the spaces represent the visualisation of the college's teaching and learning strategy. To enact that vision at City Green College, the teachers were expected to make use of independent learning in the open learning spaces suggested by the senior management and this was measured through a myriad of judgements and targets. The senior management stated (in 4.3) that they allowed teachers freedom to choose the most appropriate space to support their learners but there was still the controlling factor of observations that linked to performance management objectives. These judgements materialise at City Green College in the form of observations of teacher performance by the college management, measured against a pre-determined list of criteria. The middle managers all noted that, measured

against the criteria in the college observation policy, the teachers were performing poorly in the open learning spaces (see 4.4.5).

Ball (2003) stated that continuous judgement of teachers leads to a high-level of insecurity and instability, therefore, it is no wonder that all of the teachers I interviewed felt like those in Ball's (ibid) study and wanted the stability of classroom space. In section 4.6.4, the teachers explained how they manipulated the open learning spaces to create pseudo-classrooms to enable them to mirror the successful and trusted teaching strategies they had used in the classroom. One of the key metrics used during the observation of teaching practice is the progress of learners. One teacher, TC10, stated in section 4.4.5 that she had to work hard to make learning effective in the open learning spaces. TC3 also claimed that he liked the way he could walk around the classroom and monitor the progress of the students; something he felt was difficult to achieve in the open learning space.

FE colleges justify the collection of observation data and compilation of performance measurements as a way to meet the expectations of the UK government's education inspectors, OfSTED (OfSTED, 2018), and thereby improve teaching and learning to meet the wider neoliberal agenda of global competition in education and employment. Wood *et al.* (2016) suggested that teachers are also judged by their peers to fulfil their professional role. They explain that if an individual teacher does not fit within the expectations of the group, then they are not seen as valuable. Ball (2003) agreed, stating that not only are teachers comparing their performance to the organisational

observational tools, teachers are also comparing their performance to other teachers and the expectations of their students. I argue that my research findings support this perception of performance and is leading to teachers of City Green College needing the security of the controlled environment of a classroom or recreating unsuitable classroom teaching strategies in the open learning spaces. The teachers, therefore, are not using the innovative practice as hoped by the senior management, which I will discuss further in section 5.6.

5.4.5 Teacher's use of space conclusion

The senior managers of City Green College claimed to enable autonomy to innovate in the new learning spaces within the college. However, the constant monitoring of performance can lead to Feather's (2014) concern that the notion of 'professionalism' could be used by the management to control teachers' compliance and, rather than identifying what is best for the learners, the teachers look for space in which they can best demonstrate their teaching ability. The role of OfSTED as the government's auditors is called into question by McCullagh *et al.* (2000), who stated that it seemed impossible for teachers to use autonomy and professional judgement to use space appropriately when they are paid and audited by the state. This suggests that instead of improving teaching standards, OfSTED are in fact stifling innovation and preventing the teachers at City Green College from experimenting in the new learning spaces. My observations and interviews in chapter 4 identified that the teachers were anxious about the expectations regarding how the new

learning spaces could be used, particularly when they were being observed, with teachers reverting to practices that they knew were effective.

Cooper (1981) suggested that even though teaching is sometimes thought of as a bureaucratic environment, through the auditing of performance and monitoring of learner progress, teachers are able to impose their own methods for the use of learning spaces, perhaps even opposing the original design. However, Cooper based his research in the classroom. The teachers in my research found it difficult to adapt to the open and online spaces to suit their teaching methods and their learners' needs. In my literature review, I noted the Deleuze (1992) statement that even though it seems as if the users have freedom of movement between enclosed spaces, that freedom is curtailed, as each of those spaces is controlled via expectation of the user or external constraints of the duration of its use.

At the outset of my study, I thought that the management of City Green College was restricting the movement of teachers by keeping them in a classroom to monitor contact time with students and that the actions of teachers struggling to break free would be the focus of my study. However, it became clear that the managers offered the freedom suggested by Deleuze (1992) to move between the spaces. It was, in fact, the teachers' emotional attachment between the role of a teacher and the classroom that created the conflict in the use of classroom space in the new college building. For example, TC11 was vocal in his belief that he was more comfortable in a classroom (see 4.4.5), as he had more control to create a suitable learning

environment. Vischer (1989) noted that there is a direct correlation between autonomy to adjust the environment and teachers' personal satisfaction levels. The teachers in my study demonstrated frustration at not being able to control the open learning spaces as much as a classroom (see 4.6.2) and those who showed some success in the open learning spaces were able to create a pseudo classroom by using mobile partitions or gathering tables around a central location. Again, this demonstrates the teachers using the little control and autonomy they possess to revert to classroom teaching practices. It is possible that effective training could have mitigated this. The following two sections of this chapter will explore how effective the training was at City Green College to support the teachers in the new learning spaces and the impact the lack of training had on their identity.

5.5 Training the teachers

5.5.1 Teacher training

In this section of the chapter, I consider the need for training for the teachers at City Green College to enable them to meet the senior managers' expectations. The senior managers hoped that the move to the new building would compel teachers to move away from didactic classroom teaching and adopt independent learning in the open learning spaces; a teaching strategy that lacks supporting research in terms of its effectiveness.

The senior managers in my study (section 4.3) claimed that there had been too much didactic teaching (a teacher standing in front of the class

transmitting information) in the old college building and that they wanted to move to more independent learning. The review of literature carried out by McCabe and O'Connor (2014) showed that student-centred and independent learning was considered pedagogically superior to teacher-led learning. This was due to the increased deep learning assumed to be involved in independent learning, as students are actively involved in the learning and cooperated with each other to explain and define the knowledge. However, McCabe and O'Connor admitted that the evidence is not available for all subjects and a successful approach requires skilled teachers who can invest time in planning. Gibb (2017) opposed independent learning and argued for teacher-led learning, as students need guidance in developing knowledge.

Cockburn's (2005) study of classroom observations demonstrates that even though more independent learning had been planned, teachers liked to retain some control and did this by retaining a defined teaching space. There is no mention of independent learning in either the Teaching Standards (DfE, 2011) or the Professionals Standards for College Lecturers (ETF, 2014). However, student-centred and independent learning has been core in the discourse of education for the last two decades (Jacobs, Reynanda, and Power, 2016) and the senior managers of City Green College wanted to increase the opportunities for this to occur within the new building. However, Rutter *et al.* (1979) and others (Gans, 1962; Rogers and Vertovec, 1995) stated that the physical environment of schools and colleges had little effect on educational results. Nevertheless, the senior managers at City Green College saw their vision of new learning environments as a chance to improve pedagogy. The

educational architectural trend towards large atriums and open learning spaces they had seen during visits to other colleges, leaned towards this ideal. With the discourse of independent learning in mind, the senior and middle managers of City Green College designed the learning spaces to enable this through a mix of classroom, open and online learning spaces. Despite the design considerations of the new building, in section 4.3 of my study, the managers admitted that there was still a lot of didactic teaching taking place in the new learning spaces and that teachers ended up reverting to techniques that they relied upon in the classroom.

In this section, I will discuss how, even though the senior managers thought they had ‘done enough CPD [training]’ (SM1 in section 4.5.2) to support the staff in the transition from the old college building to the learning spaces in the new building that, in fact, the teachers believed that they were unsupported. In section 4.5.2, the middle managers also stated that there had been little strategic guidance on how to use the spaces and they agreed with Archer (2003) who said that without a clear definition of what is expected, people revert to what most people do most of the time. At City Green College, this left the teachers reverting to their proven classroom teaching practices in the new learning spaces.

5.5.2 Training in support of the new learning spaces

Watson and Michael (2016) stated that training can be used to communicate a set of rules that allow teachers to behave as expected in a new setting. The senior managers thought they had done this by putting into place training to

support the staff of City Green College in their transition from the old college building to the new (see 4.5.2). However, the discussions with teachers and middle managers in section 4.5.3, showed that this was not the case. During my interviews, SM4 admitted that the senior managers were unsure of what the learning spaces in the new building of City Green College would look like (see 4.7). Stating that before it was completed, it was difficult to communicate the vision of the new learning spaces to the teachers and train them in practical strategies to create independent learning. SM4 stated that they struggled with training as they did not know the details of the learning spaces before they moved in and that they had no good practice on which to base the training. SM1 stated in his interview that the senior managers thought that they had put enough training in place and had assumed that the teachers would be able to adapt once they were in the new learning spaces (see 4.7). However, the amount of training was only part of the issue. In section 4.5, the teachers claimed the training that did take place was ineffective, as they felt it lacked the detail of what Deed and Lesko (2015) termed the 'multiple and complex interactions' that take place between spaces and pedagogy. The middle management and the teachers of City Green College stated in their interviews that the training implemented lacked the detail of how the spaces could be used and they required models of good practice. Daniels *et al.* (2017) and Alterator and Deed (2013) discussed in their studies of new school buildings that setting up effective training in the lead up to a transition into a new building helps staff understand the possibilities of the space and gain a better perspective of the management of student learning. The middle managers and teachers complained (4.5.2) that there was not enough time to

reflect on changes in practice, which would have been better than the briefings they were given about the building design.

The teachers' unsuccessful attempts to gain the training they feel they needed was evidence of Feather's (2014) argument that FE teachers do not have as much control over their training as they once had. Even though the middle managers in my study suggested in section 4.4.5 that the teachers needed guidance on the strategies to use, a survey of teachers carried out by McCullagh *et al.* (2000) showed that they did not like being told which models of teaching to use. The senior managers at City Green College would argue that they considered this approach by not imposing any training, nor any specific model of teaching and learning in the new learning spaces. However, the lack of any guidance and effective training was seen by the middle managers and the teachers as a lack of strategy on how to approach teaching and learning in the new building (4.7). Gisslasson (2010), in his study of three new school buildings, explained that a lack of strategy and unfamiliar practices leads to teachers abandoning any new teaching methods and reverting to practice they understand. A practice already noted by the managers at City Green College as poor (4.2) especially when repeated in the open learning spaces. Gisslasson goes on to say that a lack of support from the senior administrators in an educational organisation prevents teachers from experimenting and innovating. Ball (2003) argued that in such an environment, the middle managers take on a key role of trying to instigate positive cultural reform. This could be seen in my research in section 4.5.2 when MM4 created his own model of how the different learning spaces of City

Green College could be used and developed his own training programme for his staff.

MM4 suggested a model of using the learning spaces in which every course in his department would be taught one-third of the time in a classroom, one-third in the open learning spaces and one-third online. Before moving into the new building, MM4 allocated time for his teaching teams to work together to explore teaching strategies that would support this model. During his interviews, he mentioned that he was conscious of training that offered time to reflect on practice (see 4.5.2), embracing Kennedy's (2005) recommendations that reflection is more transformative than any other model of training. MM4's strategy was a success in that the teachers in his team were observed by senior college managers, and OfSTED (2015), teaching effectively in the open learning spaces and making good use of the online technology.

5.5.3 Training conclusion

Deleuze (1992) continued the discussions of Harvey, Smith and Lefebvre by voicing concern that education can be seen as being influenced by market forces and returning to a model where an elite group of people have control over decision making. He stated that, rather than education being a democratic process, the management does not consider the research of others and instead uses training as a method to control teachers to enact their vision rather than develop them. This contradicts Boys' (2011) concept in her spatial triad that the use of space was a democratic process between the designers' expected use of space and the actual use of space by the teachers (see section 5.2.1). With this in mind, research question 2 in my study was to

identify if the senior managers are promoting the new learning spaces of City Green College as a means of transforming teaching practices to encourage more independent learning and less classroom-based (see 4.5.3). I was concerned that the teachers had been forced to use the new spaces through an undemocratic process by the elite (senior managers at City Green College) and had to adapt to the senior managers' vision to achieve performance management targets. However, my interviews with the senior managers identified that it was quite the opposite; they all agreed that they wanted to allow teachers the freedom to innovate pedagogy and choose the most appropriate spaces and strategies. This freedom came with a price; the lack of guidance and strategy from the senior managers on how to effectively use the new learning spaces left the teachers feeling confused over which spaces to use and unable to cope with the different demands on behaviour and resource management in the open learning spaces. The senior manager's rhetoric (see 4.3) on the learning spaces in the new building was based on increasing student-centred and independent learning. However, neither the college observation process nor the Education and Training Foundation Professional Standards (ETF, 2011) asked for evidence of the teachers planning for independent learning. Instead, teacher-driven progress and attainment were key to both the standards and the observation metrics (see appendix 9) and this becomes the focus for the teacher.

Limited training and the pressure to perform to demands of observable metrics led to teachers at City Green College wishing for classrooms to enable them to use the space and strategies that experience shows are

effective (see 4.5.3). The teachers' identity at City Green College was changing in the new learning spaces, they were no longer expected to stand in front of a group of students and direct the learning, and I explore the impact of these changes on teacher identity in the next section.

5.6 Teacher identity through the use of space

5.6.1 Introduction

The participating teachers in my study all stated that they preferred the environment of the classroom to any other learning space on offer at City Green College (see 4.5.3). Initially, my hypothesis of the use of space considered that teachers were conscious of the time they needed to spend in the classroom to meet contractual obligations (teachers at City Green College are contracted to spend eight-hundred and forty-four hours annually working directly with students). Also, the management could have been using the timetable for resource management (booking a teacher into a classroom space is a way to monitor how much teaching time is being utilised). However, the data from my interviews with the managers and teachers showed that management was not coercing teachers into a classroom as part of resource management, nor were they encouraging the measuring of time in the classroom (see 4.4.5).

The senior and middle managers were flexible in their expectations of teachers' use of a range of spaces in their teaching (see 4.6.4). In section 4.7, my findings demonstrated that it was the teachers themselves who were requesting classrooms to support their teaching. In section 5.6.1, I explore

teacher identity and how it seemed as though the 'intra-action' discussed by Barad (2003, p803), in which objects and space are inseparable, was significant and, in the case of my research, the teachers were connected to a classroom. This is supported by Buchanan (1992) who argued that occupants inhabiting space attach to that space and create an identity. My interviews with the teachers of City Green College suggested that their identity was fixed on the space occupied, unlike Barad (2003) and Buchanan (1992) who saw this link between space and identity as temporary. There was an attachment between the teachers in my study and the classroom space that seemed to survive the move into a new building, even though there was a range of alternative spaces available. In section 5.6.3, I discuss how my data showed the participating teachers perceived that they had autonomy of the space and how this was not true and, in section 5.6.4, I conclude that neoliberalism influences teachers' identity and autonomy.

5.6.2 Teacher identity

Hall (1996) explained that identity is the story we tell about who we are and Mulcahy (2014) argued that this narrative of identity is not set and differs depending on the context. Teacher identity can be constructed by the person's considerations of what it means to be a teacher and, as Archer (2003) states, how this concept of identity fits within society. According to John-Stiener and Mahn (1996), there is a range of symbols that connect internal and external identity, and Archer adds that identity is created through reflecting on one's concerns in reality and the cultural properties of that reality. Weber and Mitchell (1995 and 1996) demonstrate in their studies that the

texts and images in the media present a teacher as a person standing in front of a class and the classroom is their domain. It is no wonder that this social bias confirms the internal semiotics of the participating teachers' in my study, who identified a teacher as someone occupying a classroom. The senior managers of City Green College had admitted that teaching in the old college building had been too didactic and re-enforced this negative image of a teacher, and they were disappointed to see that offering a range of new learning spaces had not altered the teachers' need to be in a classroom. However, as we saw in 5.5, without the support of effective training, teachers were less willing to innovate and change practice when they moved into the new building.

The new learning environments, including open and online spaces, were designed to free the teacher from the classroom (see section 4.3) and as noted by Deed and Lesko (2015) to avoid being 'locked into' one space. But even Deed and Lesko remarked that the teachers' experience of learning spaces was deeply ingrained and that the conventional classroom was a space where teaching strategies were proven. Massey (1999) also believed that people can have an emotional attachment to space and they get upset when their preconceptions of space are challenged. My literature review showed that some authors lacked this consideration of emotional attachment when discussing space. Soja (1996) focused more on the economics of the use of space and Unwin (2000) stated that Lefebvre's Marxist viewpoint lacked emotional engagement with space. However, Deed and Lesko (*ibid*) argued that for teachers to use the open learning spaces, they would need to

be coached to lose some of their preconceptions of learning spaces and alter their old teaching methods which were considered inappropriate for the new learning environment.

FE has a particular teacher identity issue, as the teachers in this sector are often vocational experts who have taken up teaching to pass on their skills. Research by Robson (1998) and Clow (2001) has shown that FE teachers are now expected to be expert teachers, as well as a subject specialist. In addition, the consideration of the wider context of students' emotional needs has expanded the role of the teacher beyond being a dual professional (Avis *et al*, 2011) and increases the complexity of the identity of a teacher. The demands of performance management targets expect them to be using effective teaching strategies, demonstrate good classroom management and present positive learner progress. Radford (2013) highlighted a conflict that has arisen due to the lack of requirement for vocational experts who become teachers in FE to gain a teaching qualification and they often gain training whilst 'on the job'. Due to this approach to training, they rely on the memories of the teaching they experienced previously and the support of their colleagues who may re-enforce particular stereotypes and who may not have received formal teacher training or be qualified themselves.

The lack of training at City Green College did not help the move towards social and independent learning, as John-Steiner and Mahn (1996) noted, this approach alters the role of the teacher from someone who delivers knowledge to a facilitator of collaborative learning. This role change has been

emphasised in City Green College through the reduction in classrooms and increase in open learning spaces. A configuration of space that Smith (2017) states recast the teacher as a coach, helping learners navigate their course. Along with the change in role, FE teachers have also had to endure an increase in bureaucratic and administrative tasks (Ball, 2003). This was not helped by the architect's statement in section 4.3 that the development of the new building of City Green College helped to save the college money by reducing administration staff. Smyth *et al.* (2000) described that teachers had increased anxieties about their ability to cope with these multiple additional administrative demands on their time, such as printing handbooks, timetabling and writing to students. Teachers are also being drawn away from teaching commitments to fulfil administration duties to evidence funding requirements (Avis, 1999). Crowley (2014) also identified that teachers are not helped by the lack of definition of the teacher and learner relationship. The neoliberal agenda of market forces and competition has related education to business and recast students as customers, clients, pupils and learners, leaving teacher's confused about the expected interaction and where the power lies.

The market forces in education have created competition between educational organisations. The performance of these organisations can be compared through published results of audits of teaching and learning. This, alongside observations of practice, emphasises Ball's (2003) concern that teachers are encouraged to consider themselves as individuals, trying to improve their own observation score at any cost. Also, the open learning spaces and, as Alterator and Deed (2013) observed, the glass-walled staff

workrooms could lead to an increase in performance anxiety in the sense that there is an increase in visibility and a lack of privacy. Ball continues to argue that this alters a teacher's ethics base, to focus on performance worth and self-interest. In section 4.2, MM1, MM4 and SM4 voiced that they had seen poor practice in the open learning spaces, as teachers used classroom techniques such as dictating learning to a large group of students. The reason the teachers recreated the classroom techniques in the open learning spaces was because they felt comfortable and in control with these strategies and if they were being observed in the open learning space then they needed to use proven strategies to be successful (see 4.6). TC3 also stated that he believed that his students were attending a professional course and he felt that the classroom offered a controlled environment in which he could 'deliver' the content in a professional way, something he believed was not possible in the open learning spaces (see 4.6.2). TC3's perception of his students' views of teaching and learning were another perspective of Ball's (2003) description of constant monitoring, and the students' expectation of learning is an element of the social construction of the identity of the teacher.

5.6.3 Teacher autonomy

The teachers participating in my study believed they had autonomy to negotiate with each other to access the most suitable space for their learners and the middle managers encouraged them to find their own solutions to rooming issues (4.6.1). However, this was only limited autonomy, as the teachers were not involved in booking rooms nor the initial curriculum planning. If the teachers could not negotiate an alternative space with each other, then they were stuck with the space they had been allocated by their

manager. As we have seen in 5.5, teachers also lacked any autonomy in the training they received and therefore were left without the skills required to teach in the space they were allocated. Ball (2003, p12) called this limited autonomy 'de-professionalism', and he argues that this, along with the constant monitoring of teachers, leads to uncertainty and instability, and guilt that they are not doing their best. There is also the suggestion by Avis (1999, p.252) that the use of 'IT-driven flexible learning' to rearrange the spaces in which teachers have contact time with students adds to de-professionalism.

Smith (2017) suggested that the new learning spaces do offer a choice for teachers but at the cost of ownership, which impacts on a sense of 'self'. In the new building of City Green College, teachers were not allocated specific learning spaces as their own. This was due to economic targets of room utilisation and because all of the learning spaces were designed to be generic and able to be used by teachers from any subject area (other than the specialist science labs on the top floor and the hair salons in the ground floor). In section 4.2, the teachers explained that this lack of ownership raised their anxieties about classroom management, availability of resources and lack of displays of learners' work. TC8 was adamant that the lack of displays relating to her subject and the inappropriate presentations of other subject material was detrimental to her learners. This disagreed with Woolner *et al.* (2007) who identified that there was no evidence that displays of student work had any effect on achievement. However, Woolner *et al.* did not consider the impact on the teacher and the perception of their identity in a classroom that they feel is not their own.

5.6.4 Teacher identity conclusion

In this section, I have discussed the concern of Davies *et al.* (2001) that the lack of privacy, disruption and sense of exposure impacts on the teacher's performance levels and, as Ball (2003) suggested their struggles to meet performance metrics are often set against a duty to others. Davies *et al.* stated that teachers seek to ensure that they are seen as valuable to their students and the organisation. To do this in City Green College, teachers tried to avoid teaching in the open learning spaces and instead accessed classrooms in which they felt more in control and able to use proven teaching strategies.

The role of a teacher has continually changed over the decades, yet I argue that the classroom has always been there as a foundation but has been removed in the new building for some of the classes. Deed and Lesko (2015) were clear that teaching strategies are ingrained in the classroom and, from the observations of practice and my interviews in section 4.6, these teaching strategies and the classroom are ingrained into the teachers' perception of 'self', therefore, teachers feel more comfortable in the classroom. The teachers' memories and experiences match the routines of the classroom space. According to Alterator and Deed (2013), teaching routines begin to unravel and be challenged once a teacher is expected to teach in an alternative space. The new open learning spaces studied in my research have to compete with centuries of classroom experience and this makes the teacher 'mindset' change, suggested by the middle managers in section 4.4.5, very difficult to achieve in the short-term.

The statement of Wood *et al.* (2016) that a professional identity needs to fit within a socially accepted norm to be seen as valuable seems to fit the case of City Green College. The teachers in the college felt like they were teachers when they were in a classroom but struggled to alter their role and feeling of worth when teaching in the open learning spaces. As the performance metrics were focused on classroom practice, the teachers did not value the time they spent trying to manage the disruptive behaviour in the open learning spaces, nor invest in experimenting with alternative teaching strategies.

The autonomy to experiment in the new learning spaces of City Green College was encouraged by the senior managers, but not helped by the constant monitoring of performance through internal and external observations. The middle managers noted that performance in the open learning spaces was poor (see 4.2). Watson (1998), in his discussion about teachers' implementation of change within classrooms, noted that an imposed top-down approach, similar to City Green College managers expecting the new learning spaces to drive change in teaching practise (4.3), negates consultation. Teachers see the new teaching method as separate from their daily routine and they then struggle to see where it could fit within their teaching and if it does not fit, they do not implement it. The management then blames the teachers for not enacting their vision of innovative pedagogy. Watson argues that teachers need time to reflect on the new teaching practices to allow them to see how they could be integrated into the daily routine of teaching. Knight (2009) suggested that you cannot blame the

teachers for not implementing the expected change. He states that teachers in a typical day have a myriad of tasks to perform including assessment, planning, report writing and contacting parents. They also have to complete a task of teaching that Knight stated, requires a great deal of emotional energy and he adds, teachers are often left without the energy to put change into practice. Knight also suggests that teachers are unlikely to accept change if there is no evidence or experience to support the change. As the teachers of City Green College had not seen or experienced the new learning spaces before they were expected to teach within them, they could not adapt.

The pressure of the need to present themselves as a 'good' teacher and support the college to gain a score better than other colleges causes anxiety amongst teachers that prompts them to revert to practices that they know work (Deed and Lesko, 2015). Ball (2003) was concerned about the de-professionalisation of the teacher and states they should be given more autonomy to experiment. Altering the metrics used during performance observations in City Green College to allow the teachers to establish a new working practice, or removing the observations altogether as suggested by *The Guardian* (2016), would, perhaps, help empower teachers to make better use of the open learning spaces.

As Barad (2003) highlighted, the teacher is inseparable from her/his taught strategies and Buchanan (1992) added that the teacher's identity is constructed through the occupation of a space seen to signify a classroom. This suggests that there needs to be a significant investment in training to

alter the 'mindset' of the teachers to reconfigure what constitutes the identity of a teacher in City Green College, and not just training on how to use the spaces (discussed in 5.5). MM3 also suggested that there needs to be an investment in training the students to understand the different spaces within the college and how the role of the teacher has changed from a transmitter of knowledge to a coach or facilitator of student-centred and independent learning (see 4.6.3). Long and Ehrmann (2005, p47) suggested that students carry with them an image of learning and it is often the 'broadcast model' of the teacher standing at the front of the class, as exemplified in TC3's perceptions his students' expectations in section 4.6.2. As Laguerre (1990) and Pinder (2005) explained, the behaviour of users within the spaces is altered due to the social rituals that occur there, triggered by the association of these rituals and the semiotics of the space. At the present moment, neither the teachers nor the students have any social reference regarding how a teacher should operate and be identified in the open learning spaces and continually refer back to the historical references of a teacher in the classroom.

5.7 Conclusion

At the start of my study, I identified Boys' (2011) spatial triad as the theoretical framework on which to base the development of my research questions. This triad helped me to structure my exploration of the literature and examine how space was used by teachers to support learning, and how managers use space to alter teachers' practice to meet their vision. For the analysis and subsequent discussion of the findings, however, Boys' triad was seen to lack

a key element. Boys had based her triad on Lefebvre's (1991) work but found his triad to be politically biased towards Marxism. The analysis of my data and the exploration of the literature to support the discussion showed that there was a political agenda in the design of the new learning spaces of the college and this influenced how the teachers used the spaces.

Unlike Lefebvre's Marxist perspective, neoliberalism was ingrained in all aspects of my study. Even though I was still working towards answering my initial research questions developed around Boys' (2011) triad, the structure of my analysis and discussion was more in-line with Lefebvre's (1991) spatial triad of: 1. Spatial Practice of a society (current use of space), 2. Representations of Space (expectations of the use of space by management) and 3. Representational Space (teacher identity within the spaces). Lefebvre saw step two as the expectations of the elite on how spaces should be used, similar to City Green College management creating a space to meet the agenda of independent learning. However, unlike Lefebvre who explained that step three was where the users rebelled against the vision of the elite and found their own use of space, the teachers in City Green College did not rebel but were trying to make the best of the spaces to support independent learning. However, they had not received the training to enable them to do this and, therefore, reverted to a classroom or classroom practice in the open learning spaces.

The new building of City Green College was born out of the UK government's BCF programme and was developed around the college management's vision

that the new learning spaces would allow for more independent learning. In the interviews, the influence of neoliberalism on these design decisions could be heard (see 4.3). Neoliberalism, through elements of economics, competition and market forces, influenced the design of City Green College's new building and was demonstrated by the economic savings in reducing the size of the estate and the reduction in the number of staff. The design aimed to create a building that would stand out from its competitors and appeal to students that may apply to other colleges and universities. However, according to the college middle management this market analysis was ill-judged, the managers were keen to stress that the market for City Green College was not in competition with other colleges and universities, but in encouraging the local community to enrol.

The design of City Green's new college building, based around large open learning spaces with adjacent classrooms and integrated technology, created an impressive structure that SM2 stated that she was proud to show visitors. However, Smith (2017) was right to be concerned that the large atrium and open spaces hide behind a glass façade, a series of operational issues that need to be addressed. One of the main problems raised was the perceived lack of definition between the spaces. The new building contained classrooms, open and online learning spaces. The teachers were unsure of the expectations of when to use each of the spaces and the appropriate strategies to employ. Students were socialising in the open learning spaces and the noise and disruption caused by this impacted the teachers attempt to use these spaces for teaching and learning. An issue they explained in the

interviews that could be resolved by allowing them to teach in a classroom all of the time (see 4.6.2). However, the architects admitted that the new building had fewer classrooms and therefore not all teachers could be accommodated and would have to use the open learning spaces. The architects agreed that even though there were fewer classrooms, using a blend of different spaces created enough area for all of the students in the college. The architects did have to make assumptions in their design calculations due to the competitively fluid FE market in which students can choose to attend any college, even after interview; leading to accurate student numbers being unavailable until after enrolment.

The lack of classrooms was also exacerbated by the teachers' and the middle managers' statements that there was a lack of adequate training at City Green College, preventing teachers from gaining an understanding of the possibilities of blending the new learning spaces. The one team that was seen to use the learning spaces effectively had been supported by their manager to work together and create a scheme of work for each course that utilised all of the available learning spaces. However, even the teachers within this team commented that disruption, the paucity of resources and a feeling of a lack of control made them wish to teach in a classroom, and they claimed that they were struggling to perform to their best in the open learning spaces.

In an environment of continuous observation of performance by OfSTED, managers and students, the teachers wanted to be able to use proven methods of teaching and maintain control of the learning, which they felt could

be achieved in a classroom. The outcomes of the observations of practice impacted on the college's profile against other educational institutions and the teacher's own feeling of worth amongst their peers. The pressure to perform to their best, coupled with a confusion of the roles teachers were expected to play in the different learning spaces, led to teachers reverting to teaching strategies that have been successful in the past in a space (the classroom) that feels more comfortable. Thus, confirming the statements of Barad (2003), Buchanan (1992) and Connelly and Cladinin (1988) that the experiences and knowledge of a teacher are ingrained in their identity and this influences their future actions. The ill-defined open learning spaces, and roles within, have led to the teachers of City Green College retaining the identity of a teacher as a person that controls a classroom.

Chapter 6: Conclusion

6.1 Introduction

My final chapter has been organised into eight sections. It gathers together findings from my study and explores relevant literature in relation to my aims and research questions. Section 6.2 contemplates the study's three research questions and the findings associated with each one. I evaluate the theoretical framework used in my research in section 6.3 and, in 6.4, I consider the strengths and limitations of my thesis. I outline the original contribution offered by my study in section 6.5, followed by recommendations for policy and practice in section 6.6. Section 6.7 consists of recommendations for future research and I conclude my thesis by reflecting on my research journey in section 6.8.

6.2 Addressing the research questions

My study analysed how teachers were making use of the learning spaces in the new building of an FE college. I aimed to discover if the senior managers had expected particular learning spaces to be used and why the teachers strove to remain in the classroom, rather than use other available learning spaces (open and online learning spaces). I will address each of my research questions in turn.

6.2.1 In which spaces does teaching and learning occur at City Green College's new building?

The senior managers of City Green College believed there was too much didactic teaching taking place in the old building, with teachers standing at the front of the class directing the learning and wanted to encourage teachers to

promote more independent learning (see section 4.3). The data from the archived observations of the old building evidenced that all teaching took place in classrooms. The evidence of the teaching in the new building showed that this didactic approach had continued with SM4 stating that the City Green College lesson observations demonstrated that the teaching was still didactic, whether in the classrooms or open learning spaces of the new building and SM1 adding that 'when looking at the observations there was still a lot of instructional teaching'. These observations contrasted with the hope of the senior managers that using a blend of the new learning spaces would lead to staff encouraging students to participate in independent learning. My interviews with the senior managers identified that they wished to increase the amount of independent learning in line with the trend in western education for more independent learning as identified by Saltmarsh *et al.* (2015). The new college building was designed by the architects to meet this expectation by decreasing the number of classrooms and creating large open learning areas that could be used for independent learning and research (see section 4.3). However, my observations of fifteen teachers showed that fourteen taught in a classroom, two of those used a mixture of classroom and open learning space and only one teacher taught solely in the open learning spaces.

My semi-structured interviews with fifteen teachers evidenced that they all felt that they were unable to teach effectively in the open learning spaces, as the space was unsuitable for their learners and there were too many distractions caused by other students who were not part of their group. The teachers commented also that there was pressure to perform as a result of the regular

performance observations carried out by the management at City Green College. Educational observation data, regulated by OfSTED, is used to compare performance by UK FE colleges. Therefore, it is unsurprising that teachers felt the pressure of performance observations, which could affect the reputation of the college and the subsequent recruitment of new students. This would ultimately affect the economic success of the organisation and threaten their job security. The observations in my study evidenced that all but three teachers remained teaching solely in classrooms and the interviews revealed that they had negotiated with each other to access these spaces. The three teachers observed teaching in the open learning spaces commented in their interviews that they would prefer to teach in a classroom and were only teaching in the open learning spaces as there were no alternative classrooms available.

6.2.2 Is there an expected transformation of teaching through the use of the new learning spaces?

My interviews identified (section 5.4.2) that the senior managers at City Green College had been seduced by the positive but (as noted by McCabe and O'Connor, 2014, and Gibb 2017) unsubstantiated discussions around independent learning. The managers hoped the new learning spaces at the college would encourage teachers to increase their use of this technique. During my interviews, SM1 stated that the senior managers had observed the architecture of organisations like the Massachusetts Institute of Technology (MIT) and considered the building designs that included fewer classrooms and increased amount of large shared open-plan spaces, as a way to improve teaching and learning. SM1 was convinced that the teaching staff would adapt

and alter their practice to make use of the different spaces to include more independent learning.

The expectations of the teachers to adapt to the new spaces of City Green College did not materialise and all of those I interviewed wanted to teach in a classroom. My interviews with the teachers and middle managers indicated that this was due to the senior managers failing to address two key issues: first, the teachers needed training and support in using the new learning spaces for independent learning. As I mentioned in section 6.2.1, the managers continued to observe didactic or instructor-led teaching and in section 6.8.3 I mention that not addressing the key issues outlined above led to teachers to default to teaching strategies they believed effective and not work in collaboration with the students to make the best use of the new learning spaces in the essence of the socially constructed space defined by Massey (1999) and Harvey (2005).

The literature shows that relying on performance management observations without training, discourages teachers from innovating practise and encourages them to use the same strategies that they know work within the classroom (Archer, 2003). This was evident in my study through the comments of the middle managers (in section 4.4.5), who observed teachers attempting to use classroom techniques in the open learning spaces and the teachers complaining in their interviews that the open learning spaces were inappropriate. Second, the students at City Green College were mostly 16-18

year olds recruited from secondary school and, therefore, not as mature as the learners the senior managers had observed at MIT. The City Green students needed more support regarding how to use the different spaces than those transitioning to a university environment. TC5 claimed that students attending the college were not mature enough to work independently in the open learning spaces and did not have the skills to do so.

The analysis of the interviews showed that the classroom is part of the identity of a teacher. For example, TC10 stated that she felt more comfortable in a classroom and more like a teacher. Therefore, to encourage the use of other spaces, teacher training needs to alter those beliefs and not just offer practical strategies to use in the space. My interviews demonstrated that City Green College did not offer such training and SM1 admitted that the senior managers expected the teachers to adapt once they were using the spaces.

6.2.3 What issues do teachers face when negotiating with the new learning spaces (gaining access and using the different types of learning space)?

Section 6.2.1 recognised that teachers preferred to use the classroom for teaching and learning over any other space in the college. In section 6.2.2, I explained that the teachers did not receive enough training to gain confidence in using spaces other than the classroom. This led to all of the teachers who were interviewed stating that they wanted classrooms to teach their students. Teachers had to negotiate with their managers, and with each other, in order to access classrooms, as the architects had reduced the number of classrooms in the new college building from the amount available in the old building. My interviews evidenced that the main motivator for this negotiation

was to move from teaching in the open learning spaces to a classroom. TC4 and TC11 clearly stated in their interviews that they actively searched for a classroom and wanted to work in an environment in which they were comfortable. Those teachers that remained in the open learning spaces, due to a lack of opportunity to work in a classroom, negotiated with the learning spaces by adjusting the furniture to create a pseudo-classroom in that space; moving student tables around a central table occupied by the teacher or using mobile screens to create a secluded classroom space. Once the space had been adapted, the teachers in my interviews stated that they had to negotiate with the other students using the open learning spaces to ensure that they were not generating too much noise during their social interaction or distracting those students that were part of the class.

6.3 Contribution of the theoretical framework

My theoretical perspective changed during the course of my study from the modernist viewpoint of Boys spatial triad (2011) to a neoliberal adaption of the Marxist inspired Lefebvre (1991). My research questions were developed around the theoretical framework of Boys' spatial triad, which explored space by looking at: 1.The ordinary routines of the users of the space, 2.The expectations of space to alter practice and 3.How the users of the space negotiate the use of space to meet those expectations. Using this triad, I was able to structure my research to identify: 1. Which spaces the teachers of City Green College were using, 2. If the senior managers had an expectation of the new learning spaces to alter teaching practice and, 3. How teachers were

negotiating with the space, and each other, to make the best use of the new learning spaces.

It became apparent during my analysis that Lefebvre's spatial triad, with its embrace of the influence of political ideology, was more appropriate to engage with my findings. My data showed that there was more than just the teachers and the senior managers involved in the use of the new learning spaces; the influence of neoliberalism on the design and the use of space became more apparent. For my thematic analysis of the observation and interview data, therefore, I used an adaptation of Lefebvre's triad that retained his three elements and acknowledged his Marxist perspective that the elite design spaces for a specific purpose. I incorporated consideration of neoliberalism through the wider implications of market forces, competition and performance management. I also acknowledged Unwin's (2000) concern that Lefebvre's work lacked emotional engagement with space by linking teacher identity to space (see section 5.6.2). My adaptation of Lefebvre's triad comprised of a combination of the following points of interest: 1.the spaces used by the teachers, 2.senior managers' expectation of the use of space to encourage independent learning and, 3.teachers negotiating with the space, and each other, to meet the performance management targets set by the college management.

The first element of my adapted triad used the data from my observations to analyse the spaces being used by the teachers. The second element

examined the interviews with the senior managers to identify how space promoted good teaching and learning in a competitive education marketplace. The senior managers believed that by demonstrating how the new open learning spaces offered exciting opportunities for alternative teaching and learning than classroom-based teaching, students would choose to attend City Green College over competitor Colleges. However, the senior managers failed to offer supporting training to help teachers achieve alternative teaching and learning strategies appropriate to open learning spaces. The third element of the triad explored how the teachers negotiated with the spaces and each other to use what they thought appropriate for their learners, in a similar way as the users deconstruct space in Soja's research on the Thirdspace. However, in this case, the teachers were not as free to express themselves as the urban space users studied by Soja. The teachers in my study felt they had to meet the performance targets measured through observation of teaching practice and this constrained the teachers to use teaching strategies that they knew were effective.

6.4 Strengths and limitation of the study

This section is divided into two parts. Part one identifies the strengths of my study and part two discusses its limitations.

6.4.1 Strengths of the study

My research has three key strengths. The first is that it explored the use of learning spaces from the neglected viewpoint of the teacher. Previous studies have examined the use of space from the student, student-teacher or library

staff perspective. Smith (2017), for example, conducted interviews with student teachers. However, my study examines the perspective of experienced teachers as they moved from an old college building into new learning spaces. No studies focus solely on FE teachers' use of new learning spaces, how their identity impacts on their use of space and how this is influenced by the availability of spaces of different types.

Second, my study challenges the assumptions of the architects and managers about their design decisions. During my interviews, the architects and senior managers at City Green College were honest about the assumptions they made in the design of the new learning spaces. For example, AC1 admitted that they did not include the teachers in the design conversations and instead they created the spaces to meet the trend of increased independent learning.

The third strength of my study is the acknowledgement of the influence of neoliberalism on learning space design and use that emerged from my data. Previous studies of FE learning space design in the UK have considered two distinct aspects. They have either explored the practical application of the use of space and environmental factors that influence the activities in the spaces, such as Rutter *et al* (1979) or they have critiqued the BCF programme from a political viewpoint, such as Smith (2017). However, my study integrates the two approaches by considering how the new learning spaces were used and how elements of neoliberalism (such as market forces, competition and

performance management) influence the design and use of the space in the new building.

6.4.2 Limitation of the study

There are six limitations to my study. The first is that I focus on one college as a case study. The second limitation is that analysing the archived observation data conferred little value to the study. Third, insufficient data existed to analyse the economic effect of the City Green College's new building and fourth, a round of staff redundancies triggered by the move into the new building caused me to rush my interviews with the college management. The fifth limitation is the lack of data regarding the use of online learning spaces and how these may have influenced the teachers' use of spaces in the new college building. Finally, the theoretical framework I used to create my research questions and structure my literature review became unsuitable during the analysis due to the discovery in my data of the influence of neoliberalism and I needed to change approach part way through my study.

My research is based on a case study of one FE College and the decisions made by the architects, managers and the teachers within that one environment. I suggest that this college could represent any general FE College in the sector developing new learning spaces and that the literature review has been wide enough to consider a large number of other case studies. However, as noted by Bennett (2011), the users of the learning spaces are contextually dependent on the organisation and could be different in each institution. For example, in my study, the decisions made by City

Green College architects. Also, although the elements of neoliberalism described in my study that influenced the learning spaces of City Green College are drivers in all FE institutions, stakeholder reactions to them will be different in each organisation. It could also be argued that the sample size of architects, managers and teachers in my study was relatively small. However, selected participants represented a cross-section of departments across the college.

The observations and semi-structured interview methods used in my research generated enough data to analyse and answer my research questions. However, the archived observations of teaching in the learning spaces of the old building at City Green College proved to be of little value. All of the archived observations showed that all of the participating teachers sampled made use of only classroom spaces, with little independent learning in other spaces. This set a benchmark for teaching practice in the old building to compare with teaching in the new building. However, the archived observations contained limited data in terms of detail regarding which spaces were used and were limited to one hour, therefore not revealing if the learners moved to other spaces. Observing the teachers using the new learning spaces was more valuable, as I was able to see how many teachers were making use of the new open learning spaces, and was able to use my observations to add context to the teacher interviews.

I was able to see the finances of City Green College before and after the new building was developed as the overall financial health of the college is available in public records. The college was operating at a profit before the new building was constructed in 2015 and ended up £6 million in debt by 2017. However, not all of this debt was due to the capital expenditure and building loan repayments associated with the new building. During this time the UK government altered FE funding, therefore, reducing income and there was no increase in recruitment of students to City Green College after the new building was completed. This was a trend seen across the nation and again could not be attributed to the acquisition of new learning spaces. Without the fine detail of the financial accounts over the period from 2015 to 2019, it is difficult to evidence that the building costs were a causal factor of the increased debt.

A reduction in staffing costs for City Green College occurred during the move into the new building, as mentioned by AC1 in section 4.3, due to the reduction in administration staff. However, I have no evidence that the cost of the new building, or general funding changes in FE funding, contributed to these redundancies. The design of the new college left no seating or desk space for faculty receptionists or administration staff, suggesting that the senior managers and architects believed that there was no need for reception and administration staff in shared staff workspaces but they did not mention this in my interviews regarding the new learning spaces. This round of redundancies at City Green College occurred at the very start of my data collection period and included a restructure of the management hierarchy. I

was forced to interview the senior and middle managers in the sample group earlier than planned, as their jobs were at risk. I did manage to carry out a pilot interview in advance of meeting with the managers and this helped me re-structure and improve the interview questions. However, I was concerned I had not fully formed my review of the literature nor established the angles at which I wanted to approach the interviews by the time I met with these participants. Fortunately, the interviews were a success and the managers were open in their discussions about their perceptions of the new learning spaces and I ensured that I asked them at the end of each interview if I could revisit them if I needed to supplement my interviews.

My study focused on the classroom and open learning spaces, with an acknowledgement of the use of online learning spaces. These online learning spaces were used by some of the teachers to support their strategies in the classroom and open learning spaces. However, a limitation of my study is that I did not explore the effectiveness of the online spaces at City Green College and I could only record their use to complement the new learning spaces or record teachers' concerns about the reliability of the new technology. The new building was built with the infrastructure to support modern technology and data collection around the use of technology in these spaces could have offered an insight into how the teachers could use the spaces more effectively.

Another limitation of my study was the reconsideration of the theoretical framework I used. The analysis of my data showed that the original

framework, Boys' (2011) spatial triad, used to create my research questions and structure my literature review was no longer suitable due to the discovery in my data of the influence of neoliberalism. I realised that an adaption of Lefebvre's spatial triad was more suitable. This required me to spend additional, unplanned, time to add further literature to my discussion chapter, which I had not considered in my original literature review. There is a vast amount of literature available regarding neoliberalism, space and identity, which meant I needed to carefully select the appropriate text for my study at the risk of missing some key research.

6.5 Original contribution to knowledge

My study provides an original contribution to knowledge through a contemporary investigation into the use of learning spaces in FE from three key perspectives: 1. teacher perception of learning spaces, 2. teacher negotiations with space and, 3. teacher identity within learning spaces.

My first contribution considers Woolner *et al's* (2007) argument that there are few studies on specific aspects of new college buildings. The previous research into learning spaces by Akkoyunlu and Soylu (2008) focused on student use of space, and Smith (2017) concentrated on the policy drivers of the BCF programme that generated the impetus for new college buildings and student teachers' perception of the new learning spaces created within them. Neither of these studies focused on the experienced teachers' use of teaching space and why they chose those spaces.

Clarke *et al* (2002) did study a range of FE Colleges and the staff opinion on learning spaces within them. However, data for Clarke *et al*'s study considered a broad range of spaces and asked where learning took place, taking into account spaces such as library and café areas. Rather than explore the unplanned learning spaces on the periphery of the key teaching and learning areas as Clarke *et al*, my study was more focused and aimed to explore which spaces FE teachers used for teaching and learning in a new college building, and the issues around the use of classrooms, and the open learning spaces, to meet the senior managers' vision of student-centred learning. My research focuses on the teachers' perspective, based on the evidence presented by Cockburn (2005), as I agree that the teacher has to guide and support the learners in the use of the new learning spaces of City Green College before the learners are able to explore and find uses of the spaces for themselves. My research also linked the impact of neoliberalism on learning space design and use, whereas the research of Clarke *et al*. (2002) concentrated on the development and use of learning spaces without considering the policy drivers or political agenda. Clarke *et al*'s study only explored which spaces were being used by whom and did not explore in-depth the reasons for the use of those spaces. By narrowing the parameters to one particular user group, teachers, my study was able to compare the expectations of the senior managers of City Green College on how the spaces should be used and how they were actually used by the teachers.

I acknowledge that there are a number of papers which evaluate the Building Schools for the Future and Building Colleges for the Future programmes

(Mahony and Hextall, 2013; Kraftl, 2012; Besten *et al*, 2011; Everett, 2008), and an extensive body of research focuses on the use of learning spaces in educational organisations (Papachristos *et al*, 2012; Harris, 2012; Hunt, 2012; Thomas, 2010). However, there is little research interested in how teachers negotiate these new spaces for learning, especially in FE, in spite of an extensive national programme of re-development of the college estate. My research examines how teachers working in City Green College *perceive* and *negotiate with* the learning spaces in which they teach, as the teachers will need to lead the implementation of pedagogical change through their use of space and to guide the learners through these new learning spaces, before the students eventually find their own spaces to learn within the college as suggested by Mulcahy (2006).

Like my research, Smith (2017) demonstrated how neoliberalism had influenced the building of a new college. My third original contribution adds to his research by exploring how a target-driven, competitive, educational environment impacted on the teachers' use of the spaces. My interviews extended beyond Smith's discussions on the impact of the BCF programme and were able to confirm the previous literature (Buchanan, 1992) that the classroom is part of the teacher's identity. My study extended Lefebvre's triad to include this emotional attachment to space. Even though FE teachers historically come from vocational backgrounds and teach in many different kinds of spaces, my interviews evidenced that they all felt comfortable and more like teachers when teaching in a classroom space.

6.6 Recommendations for policy and practice

The data collected from my study of City Green College identifies that all of the teachers in my sample would prefer to teach in the controlled space of a classroom in which they feel 'comfortable as a teacher' (TC10). I offer four recommendations for those considering developing new FE learning spaces in the future, about how to support teachers in the transition from classroom to open learning space.

My first recommendation is that any future developments of new learning spaces need to include consultation with the users of the space throughout the conception and design phase. The architects at City Green College did not include the teachers in their design consultations and they claimed in their interviews in section 4.3 that they were fearful of receiving too many contradicting requests for learning space design. As a result, the teachers did not feel part of the design process and were not given ownership of the spaces. TC3 stated that they struggled to find identity and place in open and online spaces and TC7 argued that she had to organise the tables to take ownership of an area of the open learning spaces. Actively including the teachers in the design process would have made the building development process longer and more complex but, in doing so, it would ensure effective communication in the justification for decisions and would give the teachers the information they needed to allow them to make changes to pedagogy and curriculum. Thus, supporting Lefebvre's (1991) explanation that space is identified by those who use it and if the teachers have been part of the space development they will be able to identify with it. Actively including teachers in

the space design is supported by Watkins (2005) who stated that space is more than a physical container and is actually made by the user of the space or those passing through it. Traditionally, FE teachers have taught within many different spaces (for example, workshops, garages, salons, factory floors, offices) and considered these to be learning spaces. Smith (in Orley *et al*, 2015) argues that no matter what the type of space, the development of learning spaces in new college buildings would not alter teachers' ability to nurture an educational relationship with their students. I agree with this and, even though they were excluded by the architects from the conception and design phase, the FE teachers will find appropriate ways to support their students. For example, the teachers within MM3's department engaged actively in a process of exploring and realising the designs for the new learning spaces before moving into the new building. However, according to my research, it would have been beneficial to include all teachers in the conception and design phase.

My second recommendation is that the senior managers of a college developing new learning spaces should communicate a clear policy explaining how they expect the spaces to be used to ensure consistent use of space by staff and students. By failing to explain a clear strategy for City Green College, the senior managers left the middle management trying to translate expectations without clear guidance and this impacted on their ability to address the concerns of the teachers. Clear definition of how spaces should be used would also enable the students to identify expectations in those spaces and the staff would also feel confident when confronting any

inappropriate student behaviour. Any strategy developed should be based on previous research into learning space design and interpreted with the local context of the college in mind. For example, the learning spaces should be developed to support the progression of the learners who will be attending that particular college such as fewer open-learning spaces for independent learning and more classrooms. This would avoid City Green College's mistake of developing learning spaces from designs that followed the trend of increased independent learning and copying designs from other global institutions with student bodies that bore no resemblance to City Green College's own student population.

My third recommendation is the introduction of a policy during the development of all new learning spaces to allow teachers time to reflect critically on their teaching methods. The key to the success of this recommendation is to suspend the neoliberal target setting, in which colleges are measured against each other dependent on the performance of the teachers. The pressure of performing to the best of their ability in the new learning spaces, and to achieve positive results in observations of their teaching practice, was causing teachers to revert to teaching strategies that they knew were successful in the classroom. However, these teaching methods were not successful in the open learning spaces. I recommend that during the conception, design, building and transition to the new learning spaces, all observations of teaching practice should be suspended. This will allow teachers time to experiment with innovative teaching strategies in an environment that would not punish failure. It would also allow teachers an

opportunity to explore behaviour management techniques within the new open and online spaces and to experiment with ideas to reduce disruption and noise. I am suggesting that all internal and external observations should be halted, including those inspections organised by OfSTED; who in reality coordinated a full inspection of City Green College only two weeks after the new building opened.

My final recommendation is that a programme of training is developed and implemented that encourages staff to innovate practice in terms of alternative approaches to teaching within the new learning spaces and reflect critically on their own identity and relationship with teaching and learning spaces.

Investing in a programme that explores teachers' beliefs and values, and how these can be adapted in different learning spaces would support teachers like those at City Green College who felt unsure of how to make the best use of the spaces available. I also recommend that national programmes of teacher training explore how the identity of a teacher changes as they move from one space to another. In a classroom, the teacher is often a facilitator of learning and guides students through the syllabus. In an open or online learning space that encourages independent learning, the teacher takes less of a leading role and becomes a mentor or coach to support the learner as they work through tasks or research. In my role as a Lecturer in Teacher Education, I was aware that teacher training courses examined techniques for classroom management and professional values. However, the training did not discuss the transient nature of teacher identity through different spaces. Teacher training which includes discussions about teacher identity would empower the

trainee teacher to use or critique the methods of independent learning and enable them to deconstruct the spaces in the spirit of Soja's (1996)

Thirdspace and reconstruct it to support their learners. I also recommend that training programmes promote teacher involvement in the creation of their own performance management metrics, which would reflect on their practice in different spaces. This would allow the teacher to consider their practice in different spaces and enable them to take ownership of their own development.

The importance of training is critical to altering the belief that a teacher's domain is a classroom and to demonstrate that the classroom teaching strategies used in other spaces will not work. Daniel *et al's* (2017) study showed that a lack of training on the part of teachers led to walls being built in the open learning spaces to revert the spaces back to classrooms, and if the teacher's concerns are believed, this could also happen at City Green College. The college did not support their staff with relevant training during the time leading up to the move into the new building and as a result, the teachers felt uncomfortable teaching in the new open learning spaces. At the start of my study, I thought that the teachers would be excited to make use of the new learning spaces and grasp the opportunities offered to try out new teaching strategies. In fact, my research evidenced that the teachers needed the security of the classroom and familiar teaching techniques and were unwilling, on their own, to make the adaptations needed to use all the available space in the new building.

My own teaching practise has not altered by engaging in this research, as I was already exploring ways to use different learning spaces for teaching and learning. What has changed as a result of my study is my attitude towards supporting teachers to explore the possibilities of a range of spaces. Before my study, I thought that offering teachers opportunities to use different spaces would stimulate their natural curiosity to identify new curriculum design. However, I now realise that teachers require more support in understanding how different spaces can be used and they need time to reflect critically on how their particular curriculum area can take advantage of these spaces.

6.7 Recommendation for future research

My study took a qualitative view regarding a case study of one FE College that had developed new learning spaces. Mason (2006) and Shaw and Frost (2015) explained that there is value in exploring qualitative data from alternative epistemological positions. Therefore, it is valid that other researchers could analyse my data from their viewpoints and draw their own conclusions about the use of learning spaces in FE. With this in mind, I suggest three recommendations for future research.

My first recommendation for future study acknowledges Smith (2017), who noted that there was a lack of research on how learning spaces affect learning outcomes. My study only focused on the use of these new learning spaces and quantitative research into the impact of learning spaces on FE academic results would interest those responsible for meeting the neoliberal targets of

education success (as discussed in 4.3). This could also be supported by an analysis of how the reputation of the new learning spaces impacted on student recruitment.

Second, further research which explores the professional development required to support teachers in the use of new learning spaces would help to inform any future change management projects involving space within FE. In particular, it would be interesting to see if any specific methods of training helped teachers be confident to reflect on their values and beliefs when regarding the use of space.

My final recommendation for future research highlights that my study focuses on the teachers' use of space, and there is only a passing comment on the expectations of students. TC13 explained that his students expected him to teach them and not use independent learning strategies. Therefore, it would be useful to carry out research examining the students' perspective on the use of learning spaces and the type of learning they wished to participate in. This would complement the study by Akkoyunlu and Soylu (2008), which identified the spaces used by students, and it would also contribute towards the development of a transition programme for students moving from a school to an FE College.

6.8 Reflections on my research journey

My research journal evidences my struggle to create time for study amongst a busy working schedule and home life. As a result of this, my journal is littered

with evidence of the many missed deadlines. During my research, I explored a multitude of perceptions of space and spent time reading around a topic that I had not considered in any depth before. I originally took a deductive approach to my research and looked for the answer to a specific hypothesis. However, as I analysed my data I found that this approach was inappropriate and moved to a more inductive approach. This was due to the analysis showing that neoliberalism had an impact across my data – something I had not considered at the outset. Once the analysis of my data showed links to neoliberalism, I underestimated the time needed to examine this ideology and its impact on the different aspects of my work. Sections 6.8.1 and 6.8.2 in this chapter discuss how my inquiry and writing skills have developed whilst participating in this research, and in 6.8.3 I explain how the findings of my study have altered my view of the world.

6.8.1 Inquiry skills

At the start of my research, I was formulaic and restrictive in my inquiry style. This could be seen in my initial literature review, during which I was seeking to identify specific texts to meet my research questions and not considering any wider implications. This was also apparent in my initial analysis where I made use of the research software NVIVO to analyse my results. I found that organising digital folders into themes was restrictive, and I struggled to visualise links across the data. During the analysis, I reverted to printing out the interview and observation notes onto paper cards and spreading them out on the floor to identify patterns and trends. However, my background in software development made me overconfident in the use of NVIVO software without fully understanding how it worked. Spreading the cards on the floor

allowed me to explore the different viewpoints within my data and enabled me to see the wider context of the impact of neoliberalism on the use of learning spaces in FE. Previously, I was unable to see the neoliberal elements as I focused on analysing my data to directly address my research questions, and did not see a 'bigger picture'.

6.8.2 Writing style

At the start of my studies, I had planned to write my thesis in a more creative style by involving a narrative and presenting my research through a story. However, this felt inappropriate, as there were numerous elements of the use of space, neoliberalism and teacher identity that needed to be explained and embedding these within a narrative could have confused the reader. Also, writing in a narrative style would have made the interpretation of the data more complex than needed. Being conscious of this decision to be more succinct in my writing, however, led me too far in the other direction and become too technical and descriptive and not analytical. I focused on describing the data without examining why the data displayed particular themes, nor the impact of these themes on the use of space within the college. In my enthusiasm to describe, I rushed my writing and this led me to regularly fail to support the reader by not signposting where my narrative was heading and to include too many proofreading errors as I excitedly transferred my thoughts onto paper. The research process has made me more conscious of each word I write and the need to guide the reader through my thoughts.

6.8.3 How has my view of the world changed?

I started out on this research journey with the beliefs of a classical scientist, as I was a chemical engineer and a computer scientist in previous job roles. This led me to want to make use of quantitative methods in the search for the answers to my research questions. When planning my study of how teachers made use of the new learning spaces in an FE College, I was supported by colleagues and my supervisor to acknowledge the range of methods and the richness and depth offered by qualitative research. To explore teachers' use of space in depth, however, I choose semi-structured interviews and free-form observations as tools to collect data. However, I still used a modernist theoretical framework that looked for definitive answers to defined questions, through Boys' (2011) spatial triad. By using this framework I would be able to collect data from these groups and answer the question of why teachers were not using all of the space available and attempted to remain within a classroom. As my study developed, I realised that more and broader political viewpoints needed to be considered.

The interviews showed that elements of neoliberalism were affecting all aspects of my research, from the design decisions made by the senior managers and architects to the decisions by teachers regarding which spaces they used. This led me to revisit the poststructuralist spatial triad of Lefebvre (1991), on which Boys had based her framework, but in adapted form, as she thought the Marxist perspective of Lefebvre was 'of its time' and not contemporary. Lefebvre considered space as a triad of power stating that space is controlled by the elite and used by the workers, with the third

element of the triad evidencing how the workers are using the space to rebel against the controlling elite and use the space in a way they claim more appropriate. The observations and interviews with the teachers in my study did identify some rebelling against the senior managers' expectations that the open learning spaces should be used for independent study, as teachers used tables and portable screens to create pseudo-classrooms in the open spaces. The teachers, equipped only with classroom teaching strategies and an internal concept of a teacher standing in front of a class, behaved in this way to find their own coping mechanisms in new open learning spaces in the face of performance management observations that expected success against the same metrics as in a classroom.

The depth of analysis and reading I have needed to employ to ascertain the issues surrounding the teachers' use of space in a new building of an FE College, has convinced me that there is more to teachers' use of space than just the availability of classrooms. At the very start of my research journey, I claimed that there was no initial indication that the teachers at City Green College were against change or locked in any power struggle with senior management to retain traditional classrooms, as suggested by Brandon (2005) in his study of street-level bureaucrats. I also initially hypothesised that the middle management of City Green College needed to allocate teachers to classrooms to measure the teachers' contact time with students to fulfil contractual obligations. I also was convinced that teachers were conscious of this and wanted to teach in classrooms to ensure that they could evidence the time spent with learners. The teachers knew that this change was occurring

and, as explained by Evan's (2011) study, they used their professionalism to make the best use of the learning spaces for their students in an attempt to implement the efficiency policies written by the senior managers.

I am now convinced, however, that I was wrong to make these assumptions, as my data identified that the senior and middle managers were more liberal with their definition of student-contact time. They stated in their interviews that working with students in any classroom, open or online space could constitute contact time and be counted towards the eight-hundred and forty-four hours of required annual teaching time. My study convinced me that it is the teachers themselves who are arguing for classrooms and it is they who are negotiating with each other to avoid teaching in the open learning spaces. This desire to teach in a classroom was underpinned by my data, which confirms the literature (Buchanan, 1992; Barad, 2003), that the spaces used by teachers are entwined in their identity. The teachers stated that they felt comfortable and in control in a classroom and the opposite in the open learning spaces. It is not enough for the senior managers to assume that teachers will adapt to new learning spaces when time is required for teachers to reflect and unpick their identity within space. The architects are concerned with meeting the design brief of the space and not its use (Lundstrom *et al*, 2016). As the concept of space and its use are fluid and socially constructed, learning can happen anywhere. Learning spaces are co-constructed by the teachers and the students and this is an iterative process in which all stakeholders (teachers and students) have a voice to feedback and influence the use of the space (Olsen and Guffy, 2016). Lundstrom *et al* (2016) explain that co-

creation of space has been applied to the design of spaces since the 1970s but it is time-consuming and difficult for the designers to be able to consider environmental factors on the humans with space, such as comfort and well-being, therefore, in case of learning spaces, teacher and students need to work together to develop the spaces to support their needs. The co-creation of space supports Ingold's (2000) point of view that life is 'always going on' and the concept of space is fluid. He stated that spaces do not contain lives, but that lives go through, around to and from spaces. However, I have come to appreciate that others may not view space in the same way and need the symbolism of the space to lead the activities that take place within. This acts as a kind of identity and structure.

Throughout my learning journey, I had to come to terms with the complexity of educational research and the research process took longer than I expected. I was often frustrated at continually having to explore different viewpoints and possibilities. However, I understand the importance of this. My study certainly was not as straightforward as the smaller-scale, quantitative research I had carried out in the past. The experiences I have learned during my study have increased my confidence in educational inquiry and how I supported my research students as an academic. During the course of my EdD studies, I have changed job role, moving from teacher training to becoming a senior manager in a service department supporting academics to create online courses and there are fewer opportunities to carry out research. However, even though my EdD journey was difficult and thwart with mental anguish, the light of my inner-researcher has been stoked. I will continue to carry out

research and support my team of online course designers to challenge their view of the world.

References:

- Abraham, J. (1996). Positivism, prejudice and progress in the sociology of education: Who's afraid of values? *British Journal of Sociology of Education*, 17(1), 81-86.
- Agee, J. (2009). Developing qualitative research questions: a reflective process. *International Journal of Qualitative Studies in Education*, 22(3), 431-447.
- Agnew, J. (1995). The hidden geographies of social science and the myth of the geographical turn. *Environment and Planning D: Society and Space*, 13, 329-380.
- Agilquest. (n.d.). *Measuring the actual use of space* [online] <http://agilquest.com/Whitepapers-Reference-Guides-and-Checklists/measuring-actual-use-of-space.html> [26 Feb 16].
- Akkoyunlu, B. and Soyulu, M. Y. (2008). A Study of Student's Perceptions in a Blended Learning Environment Based on Different Learning Styles. *Educational Technology & Society*, Vol. 11(1), 183-193.
- Alterator, S. and Deed, C. (2013). Teacher adaption to open learning spaces. *Issues in Educational Research* 23(3), 315-331.
- Alvesson, M. and Skoldberg, K. (2009). *Reflexive Methodology – new vistas for qualitative research (2nd ed)* London: SAGE.
- Anderson, P. (2007). *What is Web 2.0? Ideas, technologies and implications for education*. Bristol: JISC.
- Anderson, T. (2008). (Ed). *The Theory and Practice of Online Learning*. (2nd Ed). Edmonton: AU Press.
- Amory, A. (2010). Education Technology and Hidden Ideological Contradictions. *Educational Technology and Society*, 13(1), 69-79.
- Apple, M. (2004). Creating differences: neo-liberalism, neo-conservatism and the politics of educational reform. *Education Policy* 18(1), 12-44.
- Archer, M. (2003). *Structure, agency and the internal conversation*. Cambridge: Cambridge University Press.
- Augar, P. (2019). *Independent panel report to the review of post-18 education and funding*. London: Department for Education.
- Avis, J. (1985). *Curriculum innovation in Further Education: a case study – stencilled occasional paper*. Centre for Contemporary Cultural Studies, University of Birmingham.

Avis, J. (1999). Shifting Identity - New conditions and the Transformation of practice: teaching within post-compulsory education *Journal of Vocational Education and Training* Vol 51(2), 245-264.

Avis, J. (2009). Further Education in England: the new localism, systems theory and governance. *Journal of Education Policy*, 24(5), 633-648.

Avis, J., Wright, C., Fisher, P., Swindell, S. and Locke, A. (2011). "Am I doing enough to help them?" Learners, Care Work and Wellbeing: Further Education Trainee Teachers', *Research in Post-Compulsory Education*, 16(1), p47-58.

Bakker, C. and Montessori, N. M. (2016). *Complexity in Education*. Rotterdam: Sense

Baldry, C. and Barnes, A. (2012). The open-plan academy: space, control and the undermining of professional identity. *Work, Employment and Society*, 26(2), 228-245.

Ball, S. (2003). The teacher's soul and the terrors of performativity. *Journal of Education Policy*, 18(1), 12-44.

Ball, S. and Gewirtz, S. (1997). Is Research Possible? A rejoinder to Tooley's 'On School Choice and Social Class', *British Journal of Sociology of Education*, 18(4), 575 – 586.

Barad, K. (2003). Posthumanist performativity: toward an understanding of how matter comes to matter, *Signs*, 8(3), 801–831.

Bazeley, P. (2012). Regulating Qualitative Coding Using QDAS? *Sociology Methodology*, 42, 77-78.

Bazeley, P. (2011). Integrative analysis strategies for mixed data sources. *American Behavioral Scientist*, 56(6), 814-828.

BBC. (2011). *Building Schools for the Future*, [online].
<http://www.bbc.co.uk/news/education-10682980> [27 February 2015].

Bennett, S. (2011). Learning behaviours and learning spaces. *Portal: Libraries and the Academy*, 11(3), 765-789.

Besten, O., Horton, J., Adey, P. and Kraftl, P. (2011). Claiming events of school (re)design: Materialising the promise of building schools for the future. *Social & Cultural Geography*, 12(1), 9-26.

BIS. (2014). *Government Response to the Recommendations from the Further Education Learning Technology Action Group (FELTAG)*. London: Department of Business, Innovation and Skills.

Blackmore, P. and Kandiko, C. (2012). (Eds). *Strategic Curriculum Change*. London: Routledge.

- Bogdan, R. C., & Biklen, S. K. (1982). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn and Bacon.
- Boote, D. and Beile, P. (2005). Scholars before researchers: on the centrality of dissertation literature review in research preparation. *Educational Researcher*, 34(6), 3-15.
- Borich, G. (1977). Sources of Invalidity in measuring classroom behavior. *Instructional Science*, 7, 231-245.
- Bornat, J. (2005). Recycling the evidence: different approaches to the reanalysis of gerontological data. *Qualitative Social Research*, 6(1), Art. 42.
- Boyd, W. (2000). Editorial: What counts as educational research? *British Journal of Educational Studies*, 48(4), 347-351.
- Boys, J. (2011). Where is the theory? In Boys, J. and Boddington, A. (2011). (Eds). *Re-shaping Learning: a critical reader*. Rotterdam: Sense Publishers.
- Boys, J. and Boddington, A. (2011). (Eds). *Re-shaping Learning: a critical reader*. Rotterdam: Sense Publishers.
- Brandon, T. (2005). Classic Review: Street-level bureaucracy. *Disability and Society*, 20(7), 779-783.
- Braun, V. and Clarke, V. (2012). 'Thematic Analysis' In H. Cooper (ed) *APA Handbook of Research Methods in Psychology, Vol. 2, research designs*. Washington, DC: APA Books.
- Brooks, C. (2011). Space Matters: the impact of formal learning environments on student learning. *British Journal of Educational Technology*, 45(5), 719-726.
- Bryman, A. (2007). Barriers to integrating quantitative and qualitative research. *Journal of Mixed Methods Research*, 1(1), 8-22.
- Buchanan, I. (1992). Extraordinary spaces in ordinary places: De Certeau and the space of postcolonialism. Available online at: <http://www.mcc.murdoch.edu.au/ReadingRoom/litserv/SPAN/36/Jabba.html> (accessed 6 February 2016).
- CACE (1959). *15-18 Crowther Report*. Central Advisory Council for England and Wales. London: HMSO.
- Callon, M. (1986). *Some elements of a sociology of translation: the domestication of the scallops and the fishermen of St. Brieuc Bay*. In J. Law, (ed.) *power, action and belief: a new sociology of knowledge?* London: Routledge and Kegan Paul.

- Carr, W. (2000). Partisanship in educational research. *Oxford review of education*, 26(3-4), 437-449.
- Carr, W. (2007). Educational research as a practical science. *International Journal of Research and Methods in Education*, 30(3), 271-286.
- Casey, G. and Evans, T. (2011). Designing for Learning: Online Social Networks as a Classroom Environment. *The International Review of Research in Open and Distance Learning*. 12(7).
- Chomsky, N. (1999). *Profit over people: Neoliberalism and global order*. London: Seven Stories Press,
- Clarke, J., Harrison, R., Reeve, F. and Edwards, R. (2002). Assembling Space: the question of place in Further Education. *Discourse: Studies in the cultural politics of Education*, 23(3), 285-297.
- Clifford, J. (1988). *The Predicament of Culture: twentieth-century ethnography, literature, and art*. Cambridge: Harvard University Press.
- Clow, R. (2001). Further education teachers' constructions of professionalism. *Journal of Vocational Education and Training*, 53(3), 407-420.
- Cockburn, J. (2005). Perspectives and politics of classroom observation. *Research in Post-Compulsory Education*. 10(3).
- Collins, H. M. and Yearly, S. (1992). *Epistemological chicken*. In A. Pickering (ed.) science as a practice and culture, Chicago: University of Chicago Press.
- Connelly, F. and Cladinin, D. (1988). *Teachers as curriculum planners: narrative of experience*. New York: Teachers College Press.
- Connor, M. (2004). *Andragogy and pedagogy* [online] <http://marciaconner.com/resources/andragogy-pedagogy/> [3 May 2018].
- Cooper, I. (1981). The politics of education and architectural design: the instructive design of British primary education. *British Educational Research Journal*, 7(2), 125-136.
- Cooper, P. and Davies, C. (1993). The impact of national curriculum assessment arrangements on English teachers' thinking and classroom practice in English secondary schools. *Teacher and Teacher Education*, 9(5-6), 559-569.
- Cressey, D. (2014). Infographics: Truth is beauty. *Nature*, 507, 304-305.

Creswell, T. (2014). *Place: an introduction*. West Sussex: Wiley and Sons Ltd.

Crow, G. and Edwards, R. (2012). Perspectives on working with archived textual and visual material in social research: editor's introduction. *International Journal of Social Research Methodology*, 15(4), 259-262.

Crowley, S. (2014). *Challenging professional learning*. London: Routledge.

Csikszentmihalyi, M. (2008). *Flow: The Psychology of Optimal Experience*. London: Harper Row.

Daniels, H., Ming Tse, H., Stables, A. and Cox, S. (2017). Design as a social practice: the design of new schools. *Oxford Review of Education*, 43(6), 767-787.

Davies, M., Leach, D. and Clegg, C. (2011). The physical environment of the office: contemporary and emerging issues. *International Review of Industrial and Organizational Psychology*, 26, <http://dx.doi.org/10.1002/9781119992592.ch6>.

Davies, W. (2004). *The limits of neoliberalism*. London: SAGE.

Deed, C. and Lesko, T. (2015). 'Unwalling' the classroom: teacher reaction and adaptation. *Learning Environ Res*, 18, 217-231.

DeGregor, A. (2011). Re-imagining the classroom: opportunities to link recent advances in pedagogy to physical settings. [Online] McGraw-Hill Research Foundation. [Accessed on: 19 December 2017] Available at: http://www.mcgraw-hillresearchfoundation.org/wp-content/degregor_reimagining_the_classroom

Deleuze, G. (1992). Postscripts on the societies of control. *October*, 59, 3-7.

Deleuze, G. and Guattari, F. (1998). *A Thousand Plateaux*. Translated B. Massumi. London: Athlone Press.

De Lissovoy, N. (2013). Pedagogy of the impossible: neoliberalism and the ideology of accountability. *Policy Futures in Education*, 11(4), 423-435.

DES. (1987). *The National Curriculum: consultation document*. Department of Education and Science.

DfE. (2011). *Teachers' standards*. London: Department for Education.

DfE. (2017). *Department for Education Single Departmental Plan*. London: Department for Education.

Dholakia, N. and Kumar Sinka, P. (2005). Observations on observation in India's dynamic urban markets. *Qualitative Social Research*, 6(1), 45-52.

Educational Excellence Everywhere. (2016). Department for Education March 2016.

Elliott, J. (1990). Educational research in crisis: performance indicators and the decline in excellent. *British Educational Research Journal*, 16(1), 3-18.

Emerson, R., Fretz, R. and Shaw, L. (2011). *Writing ethnographic fieldnotes* (2nd Ed). USA: University of Chicago Press.

ETF (2014). *Professional standards for FE teachers*. London: Education and Training Foundation.

Evan, T. (2011) Professionals, Managers and Discretion: Critiquing Street-Level Bureaucracy. *British Journal of Social Work*, 41, 368-386.

Everett, R. (2008). The 'Building Colleges for the Future' program. Delivering the Green and Intelligent Building Agenda. *New Review of Information Networking*, 14(1), 3-20.

Feather, D. (2014). Professionalism: doing a good job! *Research in Post-Compulsory Education*, 19(1), 107-118.

Ferguson, J. (2009). The uses of Neoliberalism. *Antipode*, 41(1), 166-184.

Fetterman, D. (1989). *Ethnography step-by-step*. London: SAGE

Fife, W. (2005) *Doing Fieldwork: Ethnographic Methods for Research in Developing Countries and Beyond*. New York: Palgrave MacMillan.

Fizumah-Dennis, C. (2014). Locating post-16 professionalism: public spaces as dissenting spaces. *Research in Post-Compulsory Education*, 20(1), 64-77.

Frankland, J. and Bloor, M. (1999). Some issues arising in the systematic analysis of focus group material, In: Barbour, R. and Kitzinger, J. (eds) *Developing Focus Group Research: Politics, Theory & Practice*, London: Sage.

Foucault, M. (1977). *Discipline and Punish: the birth of the prison*. London: Allen Lane.

Gans, H. (1962). *The Urban Villagers: groups and class in the life of Italian-Americans*. New York: Free Press of Glencoe.

Geertz, C. (1973). *Thick Description: In the interpretation of cultures: selected essays*. New York: Basic Books.

Gibb, N. (2017). The evidence in favour of teacher-led instruction [online]. <https://www.gov.uk/government/speeches/nick-gobb-the-evidence-in-favour-of-teacher-led-instruction> [2nd June 2018].

- Gribch, C. (2013). *Qualitative data analysis: an introduction*. (2nd Ed). London: SAGE.
- Gravells, A. (2012). *Preparing to Teach in the Lifelong Learning Sector: The New Award*. London: SAGE.
- Gibson, J. J. (1977). *The theory of affordances*. In R. Shaw and J. Bransford (Eds), *Perceiving, acting and knowing: towards an ecological psychology*. London: Erlbaum.
- Giddens, A. (1991). *Modernity and self-identity*. Cambridge, MA: Policy Press.
- Gislasson, N. (2010). Architectural design and the learning environment: a framework for school design research. *Learning Environ Res*, 13, 127-145.
- Gleeson, D. (2013) Trading Places: on becoming an FE professional. In S. Crowley (Ed) *Challenging Professional Learning*. London: Routledge.
- Greenback, P. (2003). The Role of Values in Educational Research: the case for reflexivity. *British Educational Journal*, 29(6), 791-801.
- Groundwater-Smith, S. and Sachs, J. (2002). The activist professional and the reinstatement of trust. *Cambridge Journal of Education*, 32(3), 341-358.
- Gillard, D. (2011). *Education in England: a brief history* [online]. <http://www.educationengland.org.uk/index.html> [19 December 2014].
- Goffman, E. (1989). On fieldwork. *Journal of Contemporary Ethnography*, 18(2) 123-132
- Gojkov, G. (2012). Postmodern Pedagogy. *Journal Plus Education*, 9(2), 9-39.
- Golde, C. (2007). Signature Pedagogies in Doctoral Education: are they adaptable for the preparation of education. *Educational Research*, 36(6), 344-351.
- Halliday, J. (2002). Researching values in education. *British Journal of Educational Research*, 28(1), 49-62
- Hall, D. (2002). *The Academic Self – an Owner’s Manual*. Columbus: Ohio State University Press.
- Hall, S. (1996) Introduction: who needs ‘identity’?, in: S. Hall & P. Du Gay (Eds) *Questions of cultural identity* (London, Sage), 3–17.
- Halsall, J. (2016). Determined learning approach: Implications of heutagogy society based learning. *Cogent Social Sciences*, 2(1).
- Hanson, J. (2009). Displaced but not replaced: the impact of e-learning on academic identities in Higher Education. *Teaching in Higher Education*, 14(5), 553-564.

Harker, R. and May, S. (1993) Code and habitus: comparing the accounts of Bernstein and Bourdieu. *British Journal of Sociology of Education*, 14(2), 169-178.

Harris, S. (2012). *Redesigning Spaces for Learning*. [online]. <http://imaginelearning.tumblr.com/> [30th January 2015].

Harvey, D. (2005). *A brief history of neoliberalism*. New York: Oxford University Press.

Harvey, D. (1973). *Social justice and the city*. Suffolk: The Chaucer Press.

Hattie, J. (2012). *Visible Learning for Teachers: maximising the impact on learning*. Oxon: Routledge.

Haw, K. and Hadfield, M. (2011) *Video in Social Science*. London: Routledge.

Hazzi, O. A. and Maldaon, I. S. (2015). A pilot study: vital methodological issues. *Business: Theory and Practice*. 16(1), 53-62

Hilgers, M. (2012). The historicity of the neoliberal state: the case for economic policymaking in Britain. *Social Anthropology*, 20, 80-94.

Hirsch, E. D. (2007). *The Knowledge Deficit*. New York: Houghton Mifflin Harcourt.

Hmelo-Silver, C. (2004). Problem-based learning: What and how students learn? *Educational Psychology Review*, 16(3), 235-266.

Holland, J., Gordon, T. and Lahelma, E. (2007). Temporal, spatial and embodied relations in the teacher's day at school. *Ethnography and Education*, 2(2), 221-237.

Hoinville, G. and Jowell, R. (1997). *Survey Research in Practice*. London: Heinemann.

House of Commons. (2018, 10th October). Education Committee oral evidence: school and college funding, HC969. Available from <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/education-committee/school-and-college-funding/oral/91625.pdf>

Howitt, D. (2013). *Introduction to Qualitative Methods in Psychology*. (2nd Ed). Harlow: Pearson.

Hughes, B. (2013). What's the deal with Guided Learning Hours? 20 Feb. *The Ofqual Blog*. [Online]. [Accessed 03 April 2019]. Available from: <https://ofqual.blog.gov.uk/2013/02/20/whats-the-deal-with-guided-learning-hours/>

Hunt, C. (2012). Learning in large learning spaces: the academic engagement of a diverse group of students. *Research in Post-Compulsory Education*, 17(2), 195-205.

Ingold, T. (2000). *The Perception of the Environment*. London: Routledge.

Jacobs, G., Reynanda, W. and Power, M. (2016). *Simple, powerful strategies for student centered learning*. Switzerland: Springer Nature.

Jennifer, A., Kawanaka, T. and Stigler, J. (1999). Integrating qualitative and quantitative approaches to the analysis of video data on classroom teaching. *International Journal of Educational Research*, 31, 717-724.

JISC. (2006). *Designing Spaces for Effective Learning: a guide to 21st century learning space design*. Bristol: HEFCE.

JISC. (2015). *Digital student exemplars* [online].
https://digitalstudent.jiscinvolve.org/wp/files/2015/09/FE10_1_Curriculum_-_HOW_FINAL.pdf [26 May 2016].

Johnson, L., Adams Becker, S., Cummins, M., Estrada, V., Freeman, A., and Ludgate, H. (2013). *NMC Horizon Report: 2013 Higher Education Edition*. Texas: The New Media Consortium.

Johnson, B. and Christensen, B. (2008). *Educational Research: quantitative, qualitative and mixed approaches*. (3rd Ed). London: SAGE

John-Stiener, V. and Mahn, H. (1996). Sociocultural approaches to learning and development: a Vygotskian framework. *Educational Psychologist*, 31(3-4), 191-206.

Jones, M. (2008). Positive confirmation in rational and irrational learning. *The Journal of Socio-Economics*, 37(3), 1029-1046.

Jung, I. and Latchem, C. (2011). A model for e-education: extended teaching Spaces and extended learning spaces. *British Journal of Educational Technology*, 42(1), 6-18.

Kalia, A. (2018). We're all competing for the same jobs: Life in Britain's youngest city. *Guardian*, 5th February.

Kelly, A. (1989). Ethics of School Based Research in Burgess, R. ed. (1989) *The Ethics of Educational Research*. London: Falmer Press.

Kehrwald, J., Head, M. and Haper, R. (2013). Lost in (open learning) space. *Journal of Academic Language Learning*, 7(2), A1-A10.

Kennedy, A. (2005). Models of continuing professional development: a framework for analysis. *Journal of In-service Education*, 31(2), 235-250.

Knight, J. (2009). What can we do about teacher resistance? *The Phi Delta Kappan*, 90(7), 508-513.

Knowles, M. S. (1975). *Self-Directed Learning. A guide for learners and teachers*, Englewood Cliffs: Prentice Hall/Cambridge. Cited in Smith, M. K. (2002) 'Malcolm Knowles, informal adult education, self-direction and andragogy', *the encyclopaedia of informal education*, [online] www.infed.org/thinkers/et-knowl.htm [20/1/14].

Kolb, D. (2014). *Experiential Learning: Experience As the Source of Learning and Development*. (2nd edition) New York: Prentice-Hall.

Kraftl, P. (2012). Utopian Promise or Burdensome Responsibility? A Critical Analysis of the UK Government's Building Schools for the Future Policy. *Antipode*, 44(3), 847-870.

Kru, E. and LucioDorigo, A. (2008). Daylight analysis in a public school in Curitiba, Brazil. *Renewable Energy*, 33, 1695-1702.

Laguerre, M. (1990). *Urban poverty in the urban Caribbean: French Martinique as a social laboratory*. Basingstoke: Macmillan.

Lam, S. (2001). Educators' opinions on classroom as a practice of staff development and appraisal. *Teaching and Teacher Education*, 17, 161-173.

Latour, B. (1987) *Science in action: how to follow scientists and engineers through society*. Cambridge: Harvard University Press.

Laurillard, D. (2012). *Teaching as a Design Science*. London: Routledge.

Law, J. (1984). *Organizing modernity*. Oxford: Blackwell Publishers.

Lave, J. and Wenger, E. (1991). *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.

Learning Futures (n.d.). *Kirklees College Case Study* [online] http://content.wortech.ac.uk/LearningFutures/story_content/external_files/Kirklees%20Case%20Study.pdf [23 May 2016].

Learning and Skills Council. (2008). *Building Colleges for the Future: the LSC's National Capital Strategy for 2008-2009 to 2010-11*. London: Department for Innovation, Universities and Skills.

Lefebvre, H. (1991). *The Production Space*. Oxford: Blackwell.

Lincoln, Y.S. and Guba, E.G. (1985). *Naturalistic inquiry*. CA: SAGE

Lingfield, R. (2012). *Professional in FE – Final Report October 2012*. Established by the Minister of State for Further Education, Skills and Lifelong Learning.

Lipsky, M. (2010). *Street level bureaucracy: Dilemmas of the individual in public service*. New York: Russell Sage Foundation.

Liu, T. (2007). Teaching in a wireless learning environment: a case study. *Educational Technology and Society*, 10(1), 107-123.

Locke, L., Silverman, S. and Spirduso, W. W. (1998). *Reading and understanding research*. London: SAGE.

Long, P. D. and Ehrmann, S. C. (2005). The future of the learning space: breaking out of the box. *Educase Review*, 40(4), 42-58.

LSC. (2008). *Building Colleges for the Future: the LSCs National Capital Strategy*. London: Department for Innovation, Universities and Skills.

Lucas, N. (1999). Incorporating colleges: beyond the Further Education Funding Council's model. In A. Green and N. Lucas (eds) *Further Education and Lifelong Learning: realigning the sector for the 21st Century*. London: University of London.

Lucas, N. (2005). *Teaching in Further Education: new perspectives for a changing context*. London: Institute of Education, University of London.

Lundstrom, A., Savolainen, J. and Kostianen, E. (2016). Case study: developing campus spaces through co-creation. *Architectural Engineering and Design Management*, 12(6), 409-426.

Lyons, E. and Coyle, A. (2016) *Analysing Qualitative Data in Psychology* (2nd Ed) London: SAGE.

McMahon, T., Barret, T. and O'Neill, G. (2007). Using observation of teaching to improve quality: finding your way through the muddle of competing conceptions, confusions of practice and mutually exclusive intentions. *Teaching in Higher Education* 12(4), 499-511

Madigan, D. and Sirum, K. (2006). Enabling Interactive Engagement Pedagogy through Digital Technology [online]
http://www.heacademy.ac.uk/resources/detail/subjects/ics/dec2006_vol.5_4_enabling_interactive_engagement_pedagogy [11 July 2014].

Mahony, P. and Hextall, I. (2013). 'Building Schools for the Future': 'transformation' for social justice or expensive blunder. *British Educational Research Journal*, 39(5), 853-871.

- Mason, J. (2006). Mixing Methods in a qualitative driven way. *Qualitative Research*, 6(1), 9-25.
- Massey, D. (1994). *Space, Place and Gender*. Cambridge: Polity Press.
- Massey, D. (1999). Space-time, 'science' and the relationship between physical geography and human geography. *Transactions of the Institute of British Geographers*, 24(3), 261-276.
- Maxwell, J. A. (2006). Literature review of, and for, educational research: a commentary on Boote and Beile's 'Scholars before researchers'. *Educational Research*, 35(9), 28-31.
- Maxwell, J. A. (2013). *Qualitative research design: an interactive approach* (3rd Ed) London: SAGE.
- McCandless, D. (2012). *Information is Beautiful*. London: Collins.
- McCabe, A. and O'Connor, U. (2014). Student-centred learning: the role and responsibilities of the lecturer. *Teaching in Higher Education*, 19(4), 350-359.
- McCullagh, G., Helsby, G. and Knight, P. (2000). *The politics of professionalism: teachers and the curriculum*. London: Continuum.
- McIntyre, D. (1997). The Profession of Educational Research. *British Educational Journal*, 23(2), 127-140.
- Mearns, J. and Cain, J. E. (2003). Relationships between Teachers' Occupational Stress and Their Burnout and Distress: roles of coping and negative mood regulation expectancies. *Anxiety, Stress & Coping*, 16(1) 71-82
- Medley, D. and Mitzel, H. (1958). A technique for measuring classroom behavior. *Journal of Educational Psychology*, 49(2).
- Milovanovic, D. (1995). Duelling Paradigms: Modernist v. Postmodernist thought. *Humanity and Society*, 19(1), 1-22.
- Mitra, S. and Rana, V. (2001). Children and the Internet: experiments with minimally invasive education India. *British Journal of Educational Technology*, 32(2), 221- 232.
- Morin, K. (2013). Value of a Pilot Study. *Journal of Nursing Education*, 52(10), 547-548.

- Mulcahy, D. (2006). The salience of space for pedagogy and identity in teacher education: problem-based learning as a case in point. *Pedagogy, Culture & Society*, 14(1), 55-69.
- Mullings, B. (1999). Insider or outsider, both or neither: some dilemmas of interviewing in a cross-cultural setting. *Geoforum*. 30, 337-350.
- NAO. (2008). *Skills for Life: progress in improving adult literacy and numeracy*. London: The National Audit Office.
- Neary, M. and Winn, J. (2008). *The student as a producer: re-inventing their student experience*. In L. Bell and H. Stevenson, and M. Neary, (Eds.), *The Future of HE* (2010). Oxford: University Press.
- Neil, S. and Etheridge, R. (2008). Flexible Learning Spaces: the integration of pedagogy, physical design, and instructional technology. *Marketing Education Review*, 18(1), 47-53.
- Newby, P. (2014). *Research Methods for Education* (2ed.) New York: Routledge.
- Nielsen, S. Z., Gade, R., Moeslund, T. B., and Skov-Petersen, H. (2014). Measuring Human Movement Patterns and Behaviors in Public Spaces. Poster session presented at Measuring Behavior 2014, Wageningen, Netherlands.
- Odhabi, H. (2007). Investigating the impact of laptops on students' learning using Bloom's learning taxonomy. *British Journal of Educational Technology*, 38(6), 1126-1131.
- OfSTED. (2012). *The report of Her Majesty's Chief Inspector of Education, Children's Services and Skills: learning and skills – (college name withheld for anonymity)*. Manchester: OfSTED.
- OfSTED. (2015). *Further Education and Skills Inspection Report: City Green College* [inspection number withheld for anonymity]. OfSTED.
- OfSTED. (2018). *School inspection handbook* [Online] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/730127/School_inspection_handbook_section_5_270718.pdf [8th September 2018].
- Olson, T. and Guffey, S. (2016). Intentional process for intentional space: higher education classroom spaces for learning. *Journal of Learning Spaces*, 5(1), 41-51
- Opie, C. (Ed.) (2004). *Doing Educational Research*. London: SAGE.

Osama, A. and Maldaon, I. (2015). A Pilot Study: Vital Methodological Issues. *Business: Theory and Practice*, 16(1), 53-62.

Owens, R. G. and Valesky, T. C. (2007). *Organizational behavior in education: adaptive leadership and school reform* (9th ed). Toronto: Pearson Education.

Ozga, J. and Lingard, B. (2007). Globalisation, education policy and politics. In, B. Lingard and J. Ozga (Eds) *The Routledge Falmer reader in education policy and politics*. Abingdon: Routledge.

Palmquist, M. and Connor, P. (2012). *Developing a research question* [online]. <http://writing.colostate.edu/guides/guide.cfm?guided=25> [9 August 2014].

Papachristos, N., Ioannis, V., Natsis, A. and Mikropoulos, T. (2014). The role of environment design in an educational multi-user virtual environment. *British Journal of Educational Technology*, 45(4), 636-646.

Payne, S. (2015). *Grounded Theory*. In E. Lyons and A. Coyle, *Analysing Qualitative Data in Psychology* (2nd Ed) London: SAGE.

Peach, D., Gomez, R. and Ruinard, G. (2013). Reconstructing Spaces and Places through Blended Work Integrated Learning. In S. Frielick, N. Buissick-Smith, P. Wyse, J. Billot, J. Natlas and E. Whitehead (Eds). *Research and Development in Higher Education: the place of learning and teaching*, 36, 336-345.

Pearson, I., Bligh, B., Brown, E., Lewthwaite, S., Graber, R., Hartnell-Young, E. and Sharples, M. (2009). *A study of effective evaluation models and practices for technology supported physical learning spaces (FELS)*. JISC.

Peck, J. (2010). *Constructions of Neoliberal Reason*. Oxford: Oxford University Press.

Peck, J. and Tickell, A. (2002). Neoliberalizing space. *Antipod*, 40(2), 380-404.

Peck, J. and Theodore, N. (2012). Reanimating neoliberalism: process geographies of neoliberalization. *Social Anthropology*, 20(2), 177-185.

Perzina, R. and Ramik, J. (2013). Self-learning genetic algorithm for timetabling problem with fuzzy constraints. *International Journal of Innovative Computing, Information and Control*, 9(11), 4565-4582.

Petty, G. (2014). *Teaching Today A Practical Guide* (5th Ed). Oxford: Open University Press.

Pinder, D. (2005). *Visions of the City*. Edinburgh: Edinburgh University Press.

- Popkewitz, T. (2009). Curriculum study, curriculum history, and curriculum theory: the reason of reason. *Journal of Curriculum Studies*, 41(3), 301-319.
- Porter, S. (1993). Nursing research conventions: Objectivity or obfuscation? *Journal of Advanced Nursing*, 18, 137-143.
- Powney, J. & M. Watts (1987). *Interviewing in Educational Research*. London: Routledge & Kegan Paul.
- Radford, E. (2013). Removal of FE qualifications requirements causes sector concern [online]. <https://feweeek.co.uk/2013/08/15/removal-of-fe-qualifications-requirements-causes-sector-concern/> [20th August 2018].
- Reason, P. and Rowan, J. (Eds.) (1981). *Human Inquiry: a sourcebook of new paradigm research*. New York: John Wiley and Sons Ltd.
- Reh, S., Rabenstein, K. and Fritzsche, B. (2011). Learning spaces without boundaries? Territories, power and how schools regulate learning. *Social and Cultural Geography*, 12(1), 83-98.
- Riddle, M. and Arnold, T. (2008). *The shutdown method: a resource kit*. Cambridge: Learning Landscape Project.
- Robson, J. (1998). A profession in crisis: status, culture and identity in the further education college. *Journal of Vocational Education and Training*, 50(4), 585-607.
- Rockinson-Szapkiw, A. (2012). Investigating uses and perceptions of an online collaborative workspace for the dissertation process. *Research in Learning Technology*. 20(3), 267-282.
- Rogers, A. and Vertovec, S. (1995). *The Urban Context: ethnicity, social networks and situational analysis*. Oxford: Berg.
- Rogers, C. and Freiberg, H. J. (1993) *Freedom to Learn*. (3rd ed.), New York: Merrill.
- Rutter, M., Maughan, B., Mortimere, P. and Ouston, J. (1979). *Fifteen thousand hours: secondary schools and their effects on children*. London: Open Books.
- Sad, S. and Goktas, O. (2014). Preservice teachers' perceptions about using mobile phones and laptops in education as mobile learning tools. *British Journal of Educational Technology*. 45(4), 606-618.
- Sammons, P. (1989). Ethical issues and Statistical Work in Burgess, R. ed. (1989) *The Ethics of Educational Research*. London: Falmer Press.

- Saltmarsh, S., Chapman, A., Campbell, M. and Drew, C. (2015). Putting 'structure within space': spatially un/responsive pedagogic practices in open-plan learning environments. *Educational Review*, 67(3), 315-327.
- Sanjek, R. (1990). *Fieldnotes: the making of anthropology*. USA: Cornell University Press.
- Schaeffer, J. (1995). Videotape: New Techniques of Observation and Analysis in Anthropology. In *Principles of Visual Anthropology*, ed. P. Hockings. Berlin: Mouton de Gruyter.
- Scherff, L. and Singer, N. (2012). The preservice teachers are watching: framing and reframing the field experience. *Teaching and Teacher Education*, 28, 263-272.
- Scherpereel, C. and Bowers, M. (2009). Team Teaching: Don't get stuck in solo silos. *Journal of Business and Training Education*, 18, 44-51.
- Schoenbach, L. (2012). *Pragmatic Modernism*. New York: Oxford University Press.
- Scollon, R. and Scollon S. (2003). *Discourses in Place: Language in the Material World*. London: Routledge.
- Scott, D. and Usher, R. (2010). *Researching Education – data, methods and theory in educational enquiry*. (2nd ed.) London: Cassell.
- Scott-Weber, L. (2004). *In Sync: environmental behaviour research the design of learning spaces*. MI: Society for College and University Planning (SCUP).
- Seidman, I. (2013). *Interviewing as qualitative research*. (4th ed.) New York: Teachers College Press
- Shaw, R. and Frost, N. (2015). Breaking out of the silo mentality. *The Psychologist*, 28(2), 638-641.
- Sheehan, J. (1986). Curriculum Models. *Journal of Advanced Nursing*, 11(6), 671-678.
- Shui-fong, L. (2001). Educators' opinions on classroom observation as a practice of staff development and appraisal. *Teaching and Teacher Education*, 17, 161-173.
- Sikes, P. (2004). *Methodology, procedures and ethical concerns*, In C. Opie (ed.) *Doing Educational Research*. 15-33 London: SAGE.
- Simpson, M. and Tuson, J. (1995). *Observations in small-scale research*. The Scottish Council for Research in Education.

Simmons, R. (2010). Globalisation, neo-liberalism and vocational learning: the case of English further education colleges. *Research in Post-Compulsory Education*, 15(4), 363-376.

Simmons, R. (2014). Further Education outside the jurisdiction of local education authorities in post-war England. *Journal of Educational Administration and History*. 46(1) 57-73

Smith, R. and O'Leary, M. (2013). New public management in an age of austerity: knowledge and experience in FE. *Journal of Educational Administration and History*. 45(3) 244-266

Smith, N. (1990). *Uneven development: nature, capital and the production of space* (2nd Ed). Cambridge, MA: Blackwell Publishers Ltd.

Smith, N. (1996). *The new urban frontier: gentrification and the revanchist city*. London: Routledge.

Smith, R. (2017). Building Colleges for the Future. Pedagogical and Ideological Spaces. *Journal of Education Policy*, 32(6), 855-870.

Smyth, J., Dow, A., Hattan, R., Reid, A. and Shacklock, G. (2000). *Teachers' work in a globalising economy*. London: Falmer Press.

Soja, E. (1996). *Thirdspace: journeys to Los Angeles and other real-and-imagined places*. Oxford: Blackwell.

Solvberg, A. and Rismark, M. (2012). Learning spaces in mobile learning environments. *Active Learning in Higher Education*, 13(23), 23-33.

Sparkes, A. C. and Smith, B. (2012). *Narrative Analysis as an embodied engagement in the lives of others*. In J. Holstein and J. Gubrium (eds) *Varieties of Narrative Analysis*. London: SAGE.

Spours, K. and Lucas, N. (1996). *The formation of a national sector of incorporated colleges: developments and contradictions*. Post-16 education centre working paper 19. London: Institute of Education, University of London.

Steer, R., Spours, K., Hodgson, A., Finlay, I., Coffield, F., Edward, S. and Gregson, M. (2007). Modernisation and the role of policy levers in the learning and skills sector. *Journal of Vocational Education & Training*, 59(2), 175-192.

Stones, T., Bru, E. and Idsoe, T. (2008). Classroom social structure and motivational climates: on the influence of teachers' involvement, teachers' autonomy support and regulation in relation to motivational climates in school classrooms. *Scandinavian Journal of Educational Research*, 52(3), 315-329.

St Pierre, E. (2013). The appearance of data. *Cultural Studies: Critical Methodologies*, 13(4), 223-227.

- The Guardian. (2016). *Should we scrap Ofsted?* [online] <https://www.theguardian.com/teacher-network/2016/mar/06/scrap-ofsted-pros-cons-alternatives> [16 March, 2016]
- Thomas, H. (2010). Learning Spaces, learning environments and the dis'placement' of learning. *British Journal of Educational Technology*, 41(3), 502-511.
- Tracy, S. J. (2010). Qualitative quality: eight "big tent" criteria for excellent qualitative research. *Qualitative Inquiry*, 16, 837-851
- Tooley, J. (2006). On School Choice and Social Class. A response to Bell, Bowe and Gerwitz. *British Journal of Sociology of Education*, 18(2), 217-230.
- UCU. (2008). Hot desking, open plan offices and space utilisation – UCU factsheet [online] http://www.ucu.org.uk/media/docs/a/h/hsbrief_hotdesk.doc [20 March 2015]
- Unwin, T. (2000). A waste of space? Towards a critique of the social production of space. *Transactions of the Institute of British Geographers* 25(1) 11-29.
- Upton, G. and Fingleton, B. (1985). *Spatial Data Analysis by Example Volume 1: Point Pattern and Quantitative Data*. New York: John Wiley & Sons.
- Van den Berg, H. (2005). Reanalyzing Qualitative Interviews from Different Angles: The Risk of Decontextualization and Other Problems of Sharing Qualitative Data. *Forum: Qualitative Social Research*, 6(1), Art 30.
- Van Teijlingen, E. and Hundley, V. (2001). The importance of pilot studies. *Social Research Update* 35 Department of Sociology, University of Surrey.
- Vischer, J. C. (1989). *Environmental quality in offices*. New York: Van Nostrand Reinhold.
- Von Glaserfeld, E. (1995). A Constructivist Approach to Teaching. In L. Steffe and J. Gale, (Eds) *Constructivism in Education*. Oxon: Routledge.
- Vulliamy, G. and Webb, R. (1992). Analysing and Validating Data, 215-229. In, G. Vulliamy (Ed) *Teacher Research and Special Educational Needs*. London: Fulton.
- Washer, P. (2006). Designing a system for observation of teaching. *Quality Assurance in Education*, 14(3), 243-250.
- Watkins, C. (2005). Representations of Space, Spatial Practices and Spaces of Representation: An Application of Lefebvre's Spatial Triad. *Culture and Organization*, 11(3), 209-220.

- Watson, C. and Michael, M. (2016). Translations of policy and shifting demand of teacher professionalism: from teacher training to professional learning. *Journal of Education Policy*, 31(3), 259-274.
- Weber, S. and Mitchell, C. (1995). *That's funny! You don't look like a teacher: interrogating images and identity in popular culture*. London: Falmer Press.
- Weber, S. and Mitchell, C. (1996). Drawing ourselves into teaching: studying the images that shape and distort teacher education. *Teaching and teacher education*, 12(3), 303-313.
- Wellington, J. (2008). *Educational Research Contemporary Issues and Practical Approaches*. New York: Continuum.
- Wellington, J. and Szczerbinski, M. (2007). *Research Methods for the Social Sciences*. London: Continuum International Publishing Group
- Wellington, J., Bathmaker, A., Hunt, C., McCulloch, G. and Sikes, P. (2005). *Succeeding with your doctorate*. London: SAGE.
- Whittle, A. and Spicer, A. (2008). Is actor network theory critique? *Organisation Studies* 29(4), 611-629.
- Willeg, C. (2012). *Qualitative Research in Psychology* (3rd Ed). London: McGraw-Hill.
- Wilson, G. and Randall, M. (2012). The implementation and evaluation of a new learning space: a pilot study. *Research in Learning Technology*, 20: 14431.
- Wilson, J. (1992). Value judgments and educational research. *British Journal of Educational Studies*, 40(4), 350-360.
- Wiles, R. (2013). *What are Qualitative Research Ethics?* London: Bloomsbury.
- Winter, C. (2012). School curriculum, globalisation and the constitution of policy problems and solutions. *Journal of Education Policy*, 27(3), 295-314.
- Wood, E. (2004). A new paradigm war? The impact of national curriculum policy on early childhood teachers' thinking and classroom practice. *Teacher and Teacher Education*, 20(4), 361-374.
- Wood, C., Farmer, M. and Goodall, D. (2016). Changing professional identity in the transition from practitioner to lecturer in HE: an IPA. *Research in Post-Compulsory Education*, 21(3), 31-52.
- Woolner, P., Hall, E., Higgens, S., McCaughey, C. and Wall, K. (2007). A sound foundation? What we know about the impact of environments on

learning and the implications for building schools for the future. *Oxford Review of Education*, 33(1).

Yardley, L. (2000). Dilemmas in qualitative health research. *Psychology and Health*, 15(2), 215-228.

Appendix 1 – Interview Questions for Managers\Architects

The outline below is a loose guide for the interviewer and is not prescriptive. The interview with the managers will explore the research questions, in particular, the second question about the expected transformation of ordinary routines:

1. What are the 'ordinary' teaching routines for a teacher at City Green College, and in what spaces do they occur?
2. Is there an expected transformation of these ordinary routines through the use of the new learning spaces by the management of City Green College or their architects?
3. How do teachers negotiate with the new learning spaces (gaining access and using the different types of learning space) in City Green College?

1. Introductions:

- a. Greetings
- b. Refer to the Participation Information Sheet and Consent Form (sent previous to the meeting) to outline the research and remind the participant the interview will be recorded.
- c. Discuss the research in relation to the new building and remind that learning spaces discussed include physical and virtual learning spaces.

2. Vision of the new building (Transformation of Routines):

- a. Did you have a role in the development of the new building?
- b. Why do you think the new building developed?
- c. What do you think was the vision of the new building?

3. Use of the new learning spaces presented in the new college building (ordinary routines):

- a. In what spaces does learning take place?
- b. What do you think teachers do in these learning spaces?
- c. What benefits to teaching and learning do you think the new building presents?
- d. Do you think there were any benefits for students?
- e. Do you think there were any benefits for teachers?
- f. Thinking of a space as a resource, is there any monitoring of spaces used by the teachers?

4. Rounding up:

- a. Thank you, is there anything else about learning spaces in Green City College that you would like to discuss?
- b. I appreciate your time, and I will keep you informed on the progress of the research. Can I contact you again if I need any further information or a follow-up interview?

Appendix 2 – Interview Questions for Teachers

The outline below is a loose guide for the interviewer and is not prescriptive. The interview with the managers will explore the research questions, in particular, the second question about the expected transformation of ordinary routines:

1. What are the 'ordinary' teaching routines for a teacher at City Green College, and in what spaces do they occur?
2. Is there an expected transformation of these ordinary routines through the use of the new learning spaces by the management of City Green College or their architects?
3. How do teachers negotiate with the new learning spaces (gaining access and using the different types of learning space) in City Green College?
4. Introductions:
 - a. Greetings
 - b. Refer to the Participation Information Sheet and Consent Form (sent previous to the meeting) to outline the research and remind the participant the interview will be recorded.
 - c. Discuss the research in relation to the new building and remind that learning spaces discussed include physical and virtual learning spaces.
5. Use of the new learning spaces presented in the new college building (Ordinary Routines):
 - a. In what spaces does learning take place?
 - b. What do you do in the different learning spaces?
6. New Building (transformation of routines):
 - a. What benefits to teaching and learning do you think the new building presents?
 - b. Do you think there were any benefits for students?
 - c. Do you think there were any benefits for teachers?
7. Negotiation with the learning spaces:
 - a. How do you plan to use learning spaces?
 - b. How do you book these learning spaces?
 - c. Thinking of a space as a resource, is there any monitoring of spaces used by the teachers?
 - d. What issues do the learning spaces create?
 - e. How do you negotiate around these issues?
8. Rounding up:
 - a. Thank you, is there anything else about learning spaces in Green City College that you would like to discuss?
 - b. I appreciate your time, and I will keep you informed on the progress of the research. Can I contact you again if I need any further information or a follow-up interview?

Appendix 3 - Ethical Review

Section A: Applicant details

Created:
Fri 5 December 2014 at 10:46
First name:
Richard
Last name:
Nelson
Email:
edp12rn@sheffield.ac.uk
Programme name:
EDU Doctor of Education (EdD)
Module name:
Thesis
Last updated:
19/12/2014
Department:
School of Education
Date application started:
Fri 5 December 2014 at 10:46
Applying as:
Postgraduate research
Research project title:
Negotiating learning spaces in an FE college new build: teacher perspectives

Section B: Basic information

1. Supervisor

Name	Email
Christine Winter	c.winter@sheffield.ac.uk
2: Proposed project duration	
Proposed start date: Mon 2 February 2015	
Proposed end date: Fri 20 May 2016	
3: URMS number (where applicable)	
URMS number - <i>not entered</i> -	
4: Suitability	
Takes place outside UK? No	
Involves NHS? No	
Healthcare research?	

No
ESRC funded?
No
Involves adults who lack the capacity to consent?
No
Led by another UK institution?
No
Involves human tissue?
No
Clinical trial?
No
Social care research?
No
5: Vulnerabilities
Involves potentially vulnerable participants?
No
Involves potentially highly sensitive topics?
No

Section C: Summary of research

1. Aims & Objectives

The aim of this study is to explore teachers' perspectives on using the learning spaces in a Further Education college new building. Teachers are encouraged by college management to engage learners by making use of the learning spaces in a new building in dynamic and interesting ways. However, these teachers are often restricted in doing this by the need for the college management to administer the estate a structured way to maximises resource use and measure teacher utilisation through class contact time.

A conflict is generated between the teachers who want to be innovative in their use of physical and virtual learning spaces and the management team, who are under pressure to maximise the use of the estate and resources. Further depth is added to this conflict when the purpose of the new build is taken into consideration. One of the objectives for the new building in this study was to create an environment in which the teachers could move away from the ordinary routine of teaching in a classroom and instead make use of a number of alternative spaces to take advantage of digital technology and expand learning beyond the classroom. The same management that is suggesting this transformation in the use of learning spaces is also restricting teachers by trying to measure and control the use of space through timetable booking systems and contact time with the learners.

This study will examine teachers' perspective on how they are negotiating with the expectation to transform their practice from classroom-based teaching to one this is more active, and makes dynamic use of physical and virtual spaces. The study will make use of a framework created by Boys, who suggested that learning spaces in education are a triad. The theoretical framework will enable the study to be structured and maintain focus. One aspect of the triad is the ordinary routines of teachers and how they use learning spaces in day-to-day activities. The second aspect is the acknowledgement of the attempts to use these learning spaces to transform these ordinary teaching activities towards another state. The third element of Boys' triad examines the participants' perception of these ordinary routines and how they negotiate with the learning spaces to attempt to transform their activities to the new expected state..

Objectives:

- to identify ordinary teaching routines of teachers in an FE college before they move into a new learning environment with new physical and virtual spaces.
- to explore FE teachers' attempts to use new learning spaces to transform their routines
- to analyse FE teachers' perceptions and negotiations of their new learning spaces

2. Methodology

This study will use the following methods

- Retrospective study of observation records of a sample of teachers to examine the learning spaces used for teaching in the old building of an FE college. These observation records identify the learning spaces used and how much time is spent using these learning spaces. They also indicate the context of the session and the learning activities that took place. This data will be used to track the physical and virtual learning spaces used, and how much time was spent delivering and supporting learning in these spaces.
- Observation of current teaching practice of a sample of teachers with a focus on which physical and virtual learning spaces are used and how much time was spent delivering and supporting learning in these spaces. The observations will involve the use of photographic and video images to help illustrate the learning spaces and add context to any observed sessions.
- Semi-structured interviews with the observed teaching staff to enquire more deeply into their uses of learning spaces; their perceptions of learning spaces and any negotiations needed to make use of the learning spaces.
- Semi-structured interviews with senior management, college architectural design team and learning development coaches to identify if the learning spaces were developed to transform ordinary routines and if so, how they thought this would occur.
- Audio recordings will be made of these interviews.

3. Personal Safety

Raises personal safety issues? No

- *not entered* –

Section D: About the participants

1. Potential Participants

The participants for this research will be eight to ten teaching staff, from a wide range of different vocational and academic disciplines, working in a Further Education College. They have been selected as they have all been teaching for a number of years within the FE College, and they have been observed teaching in the previous college buildings. The college has collected observation records on this sample of teachers and the researcher will have access to their previous teaching routines. All of the teachers in this sample are now teaching in the new building and the researcher will have access to observe how they may or may not have changed their practices in the new learning spaces.

There are eight senior managers and eight learning development coaches. It is proposed to approach two participants from each of these groups to **collect their perspectives on how they anticipated the new learning spaces might transform the teaching routine.** It is also proposed to approach two participants from the College architectural team to gather their views on how learning spaces were designed to transform teaching and learning.

2. Recruiting Potential Participants

All of the participants will be approached via email initially to arrange a face-to-face meeting. At that meeting there will be full disclosure of the objectives, design and procedures of the research, data analysis and how the information will be presented via the participant information sheet.

3. Consent

Will informed consent be obtained from the participants? (i.e. the proposed process) Yes

As well as outlining the research in full, the participant information sheet will also ask for informed consent. A copy will be signed and held by participant and researcher. The teaching staff will also be asked for retrospective consent for access and use of previous observations of their teaching. These are held centrally in the Teacher Education department and are available for the Teacher Trainers to support the teachers in their development.

4. Payment

Will financial/in kind payments be offered to participants? No

5. Potential Harm to Participants

What is the potential for physical and/or psychological harm/distress to the participants? In any observation, teachers can become anxious through the pressure of being watched. This could lead to unnecessary stress on the teachers and negative learning experiences for their students.

Teachers may also be concerned that the observation could be used to measure their performance and this information be disclosed to the organisation. The teachers, managers and Learning Coaches have a role to adhere to the college policies and guidelines on the use of learning spaces. They may be worried that anything they say that contradicts these could be used against them at a later date. During observations and interviews there is the possibility that safeguarding issues may be disclosed and these will have to be dealt with in accordance with legislation and College policy.

How will this be managed to ensure appropriate protection and well-being of the participants?

To support the teachers through the research process, the objectives of the study will be made transparent and available for discussion. There will be an emphasis in the meetings with the participants, and on the participant information sheet, that the observations are to study the use of learning spaces and not as a measure of the quality of the teaching and learning that is taking place in these spaces. It will be made clear to the teachers, managers and the Learning Development Coaches that all data will be anonymous, and destroyed two months after the thesis is published. The teachers, managers and Learning Development Coaches will be able to have access to the research data on request and have the right to withdraw at any time.

Section E: About the data

1. Data Confidentiality Measures

Names of the participants will be removed or not included in the data for this study. Instead a coding system or pseudonym, will be used if there is a need to identify individuals. At no point will photographs or video images show the identity of the teacher being observed. The organisation at the centre of the research will also not be named and will instead be referred to as a Further Education College in the North of England. However, if there is a need to name other organisations used in the research as comparison, to add context and describe specific cases, this will only be through the discussion of already publicly available information, such as case studies.

2. Data Storage

The researcher will be custodian of the data generated by the project and this data will be stored in an encrypted folder in secure cloud storage in a password-protected location. This will include photographic images, videos and audio recordings of interviews. Only the researcher and their supervisor will have access to this data and the raw data will be destroyed two months after publication of the thesis. Due to the nature of the

research data, specific individual observations and interviews, the data will not be available for further study.

Appendix 4 – Ethical Approval



Downloaded: 06/04/2016
Approved: 15/04/2015

Richard Nelson
Registration number: 120120024
School of Education
Programme: EDU Doctor of Education (EdD)

Dear Richard

PROJECT TITLE: Negotiating learning spaces in an FE college new build: teacher perspectives.
APPLICATION: Reference Number 002372

On behalf of the University ethics reviewers who reviewed your project, I am pleased to inform you that on 15/04/2015 the above-named project was **approved** on ethics grounds, on the basis that you will adhere to the following documentation that you submitted for ethics review:

- University research ethics application form 002372 (dated 04/03/2015).
- Participant information sheet 005463 version 1 (18/02/2015).
- Participant consent form 004803 version 1 (25/01/2015).

If during the course of the project you need to [deviate significantly from the above-approved documentation](#) please inform me since written approval will be required.

Yours sincerely

Professor Daniel Goodley
Ethics Administrator
School of Education

Appendix 5 - Participant Information Sheet

Project Title:

Negotiating learning spaces in an FE college new build: teacher perspectives

You are being invited to take part in a research project. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

What is the project's purpose?

The college has experienced a number of changes to the learning spaces and teachers have been encouraged to develop their teaching practice to make use of these spaces. This study is aiming to explore how teachers perceive the learning spaces and how they negotiate their use.

The project is due to be completed in July 2018.

Why have I been chosen?

You have been chosen as an experienced teacher who has been observed teaching in the previous college buildings, and you are currently teaching in the new learning spaces. The study will examine previous observations of your teaching that have been stored in the college Teacher Education department and observe you using learning spaces in the new building. At least seven other teachers will be involved in this study.

This study will use textual notes and photographic images during the observations of your teaching and the follow-up interview with you will be audio-recorded.

Or you are a Manager, Learning Development Coach or Architect, who has been involved in the development of the new learning spaces and are deemed to have an organisational view of how they could be used. At least five other individuals in this category will be interviewed. These interviews will be audio-recorded.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep (and be asked to sign a consent form) and you can still withdraw at any time without it affecting any benefits that you are entitled to in any way. You do not have to give a reason.

What will happen to me if I take part?

Previous observations of your teaching will be analysed to identify which learning spaces were used in the previous college buildings, including activity logs on the virtual learning environment.

When gathering data on the new learning spaces, each teacher will be observed on two occasions in sessions over a period of one day. Data from activity logs on virtual learning environments will also be gathered. During these observations, photographic or video images may be taken to help illustrate context and allow you to recall and discuss the learning spaces used in the subsequent interview.

After each observation, the researcher will interview the teacher to discuss how the teacher perceives these learning spaces and how s/he negotiated their use. The audio from this interview will be recorded.

Managers, Learning Development Coaches or Architects will be interviewed about their view on how the learning spaces could be used effectively and how these learning spaces are managed as a resource. These interviews will be recorded.

The finished thesis will be available in the University library.

What are the possible disadvantages and risks of taking part?

All comments during interviews and observations will be recorded and anonymised. Each participant will be given a pseudonym and it will be that pseudonym that relates the interview notes with an individual, no real names will be used in the final report. Any images or video footage that could identify you or your students will not be used in the final report. Computer imaging software will be used to distort any faces.

You may be nervous about being observed for this research, but try to remember that the researcher is looking at your use of these learning spaces and wants to find out how you use the different spaces available in the college in your teaching. The observation is NOT about your performance and the information will not be fed back to the college performance management process in any way.

What are the possible benefits of taking part?

Whilst there are no immediate benefits for those people participating in the project, it is hoped that this work will provide an insight into how teachers are negotiating the new learning spaces and this will support future training and learning environment developments. Opportunity for teachers and managers to reflect on their thinking about and use of learning spaces and hopefully learn new ideas about their more effective use of spaces.

What happens if the research study stops earlier than expected?

If this is the case the reason(s) will be explained to you in person.

What if something goes wrong?

If you wish to complain about the research, you should inform the researcher in the first instance, Richard Nelson edp12rn@sheffield.ac.uk or 07415 564292

If you feel your complaint was not satisfactorily dealt with or it is about the researcher you should contact the research supervisor Dr. Christine Winter, c.winter@sheffield.ac.uk or 0114 2228142

Will my taking part in this project be kept confidential?

All the information collected about you during the course of the research will be kept strictly confidential. Neither you nor your institution will be identifiable in any reports or publications.

A coding system, or pseudonyms, will be used if there is a need to identify individual practice or organisations

Observation records, photographic images or video material may be gathered during the research, stored for the duration of the research and then destroyed two months after publication of the thesis.

Will I be recorded, and how will the recorded media be used?

The audio and/or video recordings of your activities made during this research will be used only for analysis and for illustration in conference presentations and lectures. You or your institution will not be identifiable in these recordings. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings.

The researcher will be the custodian of the data generated by the project and this data will be stored in an encrypted folder in secure password-protected cloud storage. This will include photographic images, videos and audio recordings of interviews.

Only the researcher and their supervisor will have access to this data and the raw data will be destroyed two months after publication of the thesis. Due to the nature of the research data, specific individual observations and interviews, the data will not be available for further study. Any videos and photographic images used at conferences during presentation of the paper will not include images of you.

Who has ethically reviewed the project?

The project has been ethically reviewed by the University of Sheffield's School of Education.

The University's Research Ethics Committee monitors the application and delivery of the University's Ethics Review Procedure across the University.

Contact for further information

Researcher:

Richard Nelson
edp12rn@sheffield.ac.uk
07415 564292

Supervisor:

Dr. Christine Winter
c.winter@sheffield.ac.uk
0114 2228142

This information sheet is yours to keep and you will be given a copy of the signed consent form.

Thank you for taking part in this research.

Appendix 6 - Participant Consent Form

Title of Research Project:

Negotiating learning spaces in an FE college new build: teacher perspectives

Name of Researcher: Richard Nelson

Participant Identification Number for this project: Please initial box

1. I confirm that I have read and understand the information sheet dated 19th December 2014 explaining the above research project and I have had the opportunity to ask questions about the project.
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline. Contact Richard Nelson at edp12rn@sheffield.ac.uk or 07415 574292
3. I understand that my responses will be kept strictly confidential. I give permission for the researcher and research supervisor to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports or visual images that result from the research.
4. I understand that some photographic images may be used in the report to add context to the discussion and in subsequent conferences. None of the photographs used will include images that identify me.

I agree to take part in the above research project.

Name of Participant

Date

Signature

Researcher

Date

Signature

To be signed and dated in presence of the participant

Copies:

Once this has been signed by all parties the participant should receive a copy of the signed and dated participant consent form, the letter/pre-written script/information sheet and any other written information provided to the participants. A copy of the signed and dated consent form should be placed in the project's main record (e.g. a site file), which must be kept in a secure location.

Appendix 7 – Archived Observation

Teacher Observed: TBC4		
Observer: Richard Nelson		Observed course/ level: <i>Introduction to Health and Social Care</i>
Date: 28 th April 2014		No. of students: 18
<p>Session Focus (context) – linked to teacher’s rational of session:</p> <p>Teacher’s context: The course is level 1 certificate in health and social care. The group has 7 mature students all of which are unemployed and most have been out of education for some time. Most of the students are doing the course as they would like to work in the health and social care sector in the future. One student has Aspergers Syndrome and so I need to ensure that the class starts on time. This student also has a learning support assistant allocated to them for the duration of the course (who did not attend this session). This will be the second session and so, This will be the second time I have seen the students. The unit started will be unit 1, which is about service provision. The course runs over 18 weeks, from 9.30-11.45am.</p> <p>Observers context: The teaching during the whole observation was taking place in a standard classroom. The room is designed to sit 24 learners around group tables and there is an interactive whiteboard at one end of the room. The teacher made use of this to display powerpoint and videos. The groups around the tables worked effectively to explore the scenario tasks and discussions.</p> <p>Action points from previous observation: Review your target on starter activity. Have something for the students to do as they come in. Use techniques to engage ALL of the students more</p>		

TARGET COMPETENCE (standards refs in brackets)	Evidenced?
Domain A professional Values and Practice	
Encourage reflection amongst learners (AP 2.2)	Yes
Support and promote inclusivity and diversity (AP 3.1)	Yes
Communicate and collaborate with colleagues and outside agencies (AP5.1,5.2, BP4.1EP5.3)	Not seen
Conform to statutory requirements and maintain learning environment – Health and safety (AP6.1,6.2)	Yes
Keep accurate records (AP7.1)	Yes
Ensure professional boundaries are maintained (FP2.1)	Yes
<p>You were professional and responsive throughout. All of the students were supported throughout and you linked in a number of inclusivity and diversity issues around the topic of informal care.</p>	
Domain B Learning and Teaching	
Establish purposeful and motivating environment (BP 1.1,1.3)	Yes
Manage behaviour and challenge discriminatory attitudes (BP1.2)	Yes
Use a range of appropriate, flexible and varied teaching and learning techniques (BP2.1,2.2,2.4 CP 3.1)	Yes

Develop independence amongst learners (BP 2.3)	Yes
Engage, enthuse and motivate all learners (BP2.1,2.3, CP2.1)	Yes
Communicate effectively and present information clearly (BP3.1,3.3)	Yes
Question and listen effectively (BP 3.2)	Yes
Use inclusive and effective resources including new technologies where appropriate (BP5.1,5.2)	Yes

You got the students working as soon as they came into the classroom. A recap exercise that was challenging, but achievable as an activity to recap on previous learning and focus on the learning in the classroom.

All of the students were involved in the session and took part in the discussions.

The learning support did not attend to support the learner with a requirement. However, you did well to handle this situation and she was part of the session and not isolated in anyway.

Domain C Specialist learning and teaching

Demonstrate up to date knowledge of specialist area (CP 1.1,1.2)	Yes
Make links between specialist area its wider context (e.g. work, legislation, current issues) (CP1.2)	Yes
Ensure own key skills enable effective support of learners (CP3.4)	Yes
Work with learners and colleagues to identify and address individual key skills needs (CP 3.2,3.3)	Yes
Use and promote benefits of new and emerging technologies (CP3.5)	Not seen
Help learners identify transferable skills (CP4.2)	Yes

Good subject knowledge and encouragement to participate in the subject. You challenged the students to write out their responses to the tasks and then checked their spelling and grammar.

Domain D Planning for learning

Planning takes into account curriculum and learner needs (DP1.1)	Yes
Express and share learning outcomes for group and individuals (DP1.2, DP2.2)	Yes
Planning is flexible (DP1.3)	Yes
Include opportunities for learner feedback (DP2.1)	Yes

All of the students were clear on the session objectives and how this linked to the wider context of the course. It was good to see that they were all able to take responsibility for their own learning.

Make sure that you make the scheme of work the working document for the course to help you track the work done and the homework set, especially if you are not seeing these students regularly. Also, plan extension exercises for each of the tasks to ensure that the students are not waiting for others to finish. I know that this is difficult when they are working on tasks specifically for the exam board, however, you could encourage them to explore the subject further (as you have done in previous observed sessions).

Domain E Assessment for learning

Devise and use appropriate assessment tools (inc. appropriate learning technologies) (EP1.1,1.2, 2.3)	Yes
Use peer- and self-assessment (EP1.3)	Not seen
Use formative assessment to check all learners' progress	Yes
Make assessments accessible and clear for all learners (EP3.1,3.2)	Yes
Give constructive feedback, involving learners in feedback activities where appropriate (EP4.2)	Yes
Assessment records are accurate, standardised and relevant to awarding bodies (EP5.1,5.2)	Yes

The session was well structured to allow the students to participate in group activities and then be assessed individually through the written tasks. You used lots of positive praise and constructive

feedback throughout the session and the students felt comfortable to answer any questions directed to them.

Domain F Access and Progression- standards discussed and met elsewhere

**Additional comments and points for consideration:
(Including any outstanding features and particular strengths)**

A very good session that included all of the students and encouraged discussion around the subject. You started the session really well with a recap activity that focused the students back into learning have the holiday.

Development Areas

Encourage more peer and self-assessment

Remember to plan extension exercises for each task to avoid students waiting for others to complete

Appendix 8 – Archive observation showing observer comment of room layout

Teacher Observed: TBC3		
Observer: Richard Nelson		Observed course/ level: <i>Science</i>
Date: 31/01/2014		No. of students: 25 (2 late)
<p>Session Focus (context) – linked to teacher’s rational of session:</p> <p>Teacher’s context: Second week of the students working in groups to plan their own science practice.</p> <p>Observer’s context: The session took place in a classroom with tables in rows and an interactive whiteboard to display the material and interactive elements of the class. The room is designed for 24 learners and it seemed a tight squeeze with all your learners in there. The room layout did allow you to assess the whole group, but you were unable to move the learners about for the group work or to change the layout in anyway.</p> <p><u>Previous observation development points</u></p> <p>You need to investigate an effective way of demonstrating planning for differentiation on your lesson plan. - you have included this in your plan and Supported this with individual assessment slips.</p> <p>Try and be brave to pause and wait for the students to complete the answer to the question. For example, you asked a ‘What is happening here...?’ question and the student responded with a knowledge answer, naming the process. I think you should wait and get them to explain how it works and not jump in and answer for them. - much better questioning. You were more confident to challenge students and pause for an answer.</p>		

TARGET COMPETENCE (standards refs in brackets)	Evidenced?
Domain A professional Values and Practice	
Encourage reflection amongst learners (AP 2.2)	Yes
Support and promote inclusivity and diversity (AP 3.1)	Yes
Communicate and collaborate with colleagues and outside agencies (AP5.1,5.2, BP4.1EP5.3)	Yes
Conform to statutory requirements and maintain learning environment – Health and safety (AP6.1,6.2)	Yes
Keep accurate records (AP7.1)	Yes
Ensure professional boundaries are maintained (FP2.1)	Yes
You were able to encourage the students to reflect on their own progress on the course, their own professional values and respect the values of others. You injected just the right amount of humour and fun, while maintaining professionalism and professional boundaries.	
Domain B Learning and Teaching	
Establish purposeful and motivating environment (BP 1.1,1.3)	Yes
Manage behaviour and challenge discriminatory attitudes (BP1.2)	Yes
Use a range of appropriate, flexible and varied teaching and learning techniques (BP2.1,2.2,2.4 CP 3.1)	Yes

Develop independence amongst learners (BP 2.3)	Yes
Engage, enthuse and motivate all learners (BP2.1,2.3, CP2.1)	Yes
Communicate effectively and present information clearly (BP3.1,3.3)	Yes
Question and listen effectively (BP 3.2)	Yes
Use inclusive and effective resources including new technologies where appropriate (BP5.1,5.2)	Yes

Good recap on the previous Session to re-emphasise the importance of a name. Getting the students to provide a rationale for any name change.

Discussions were productive and supported well. It was a large group and you managed the groups well. However, one learner did come in 13mins late and snuck in. How do you know that she was up to speed on the lesson?

Your questioning was effective and you responded to the student feedback, even when it was not as you expected.

Good classroom management, ensuring that all of the students could be heard.

Even though the classroom layout does not lend itself to group work, you managed the discussion groups well.

Domain C Specialist learning and teaching

Demonstrate up to date knowledge of specialist area (CP 1.1,1.2)	Yes
Make links between specialist area its wider context (e.g. work, legislation, current issues) (CP1.2)	Yes
Ensure own key skills enable effective support of learners (CP3.4)	Yes
Work with learners and colleagues to identify and address individual key skills needs (CP 3.2,3.3)	Yes
Use and promote benefits of new and emerging technologies (CP3.5)	Yes
Help learners identify transferable skills (CP4.2)	Yes

Well-presented session and good demonstration of your subject Knowledge and the Wider Context of work practice. There were opportunities for you to assess the students' literacy skills through their plans and discussion notes. You also asked the students to self-assess their study skills to support their essay writing.

You comfortably sorted out the Video issue with no fuss.

Domain D Planning for learning

Planning takes into account curriculum and learner needs (DP1.1)	Yes
Express and share learning outcomes for group and individuals (DP1.2, DP2.2)	Yes
Planning is flexible (DP1.3)	Yes
Include opportunities for learner feedback (DP2.1)	Yes

The session was effectively planned. Clear objectives and outlines of varied activities.

There were links to the following week and the summative assessment.

Differentiation was clearly outlined in the plan and demonstrated in class through the groupwork.

Domain E Assessment for learning

Devise and use appropriate assessment tools (inc. appropriate learning technologies) (EP1.1,1.2, 2.3)	Yes
Use peer- and self-assessment (EP1.3)	Yes
Use formative assessment to check all learners' progress	Yes
Make assessments accessible and clear for all learners (EP3.1,3.2)	Yes
Give constructive feedback, involving learners in feedback activities where appropriate (EP4.2)	Yes
Assessment records are accurate, standardised and relevant to awarding bodies (EP5.1,5.2)	Yes

A great Use of ClassDojo to give points to the groups as they progressed. You then expected them to reflect on why they achieved the points they did.

The concern slips were a good idea to identify those students who require further support. This will help track individual progress. In addition to the general academic support could you have included a section asking each individual something specific about the session so you know that each individual has learnt something from today.

Good use of mini whiteboards to assess the groups' progress.

Domain F Access and Progression- standards discussed and met elsewhere

Additional comments and points for consideration:
(Including any outstanding features and particular strengths)

An excellent lesson that demonstrated you are a great teacher and an inspiration to your students.

Development Areas

An excellent lesson - no development areas. Just watch out for late comers sneaking in and merging with such a large group.

Appendix 9 – Example of an observation from the New College Building of City Green College

TC7 observation notes

Context: 16-18 year old. 18 in the class, Health and Social care, Level 2 Learners.

9.00	<p>The learners meet in a standard classroom in the new building. It seats 24 learners around round tables. There is a presentation wall with a projector and display screen, and a whiteboard. A window on a wall perpendicular to the display board, and opposite this is the wall with the door. The room is on the second floor. Therefore, the view of the window is roof tops and sky. The walls are painted white, except for the wall with the door, which is painted a solid light blue. This colour matches the theme colour of the 2nd floor of the new building.</p> <p>The learners came in talking and laughing. They were discussing a number of off-topic tasks. The teacher had included a number of activities on the tables [including a wordsearch and crossword]. The learners sat at the tables and spotted the work, the discussion altered to focus on the tasks. All of the learners have stopped discussing their own conversations and are working on the activities.</p>
9.10	<p>The teacher stands at the front and presents the learning outcomes of the session, using powerpoint. She then discusses feedback on the starter activities. These activities relate to the previous session and act as a recap.</p>
9.30	<p>The teacher presents the new tasks for the day. She offered some input with directed questioning. The teacher then shows a video scenario of the topic. At the end of video the teacher handed out a printed scenario for the learners to work on in groups. All of the learners were engaged and the teacher gave them 10 minutes to discuss.</p>
9.40	<p>The teacher brought the group focus onto her at the front. She asked each group around the room requesting feedback from the scenario activity. All of the learners were involved in the discussion, some of the learners were a lot quieter than others. But, even those learners offered some answer to questions.</p>
10.00	<p>After the discussion the teacher present another task on screen. This task involved some research and the learners to produce a flip chart of ideas to the rest of the group at 11.00. The 2 learners</p>

10.15	<p>asked questions about the task and then put themselves into groups. The teacher told them to leave the room and go and find space in the open learning zone to research and work. The learners packed up their stuff and had all left the room by 10.10 after some chatting. These conversations were a mix of task and off-task.</p>
	<p>After the teacher packed up, she left the classroom and moved into the open learning zone. The teacher goes out of the classroom and finds a table in the open learning space to place her material down. Scanning the open learning space, 3 groups of learners could be seen working together on tables near by. I could see another group on the floor below, in the library accessing the library catalogue (the learners can be seen as there is an open atrium in the new build so parts of the different floors can be seen, all the way down to the ground floor).</p>
11.00	<p>For the next 45 minutes the teacher walks throughout the open learning space discussing the issues with the students. I am not quite sure if the teacher was able to catch up with all of the learners. I did not see some of the learners for the entire 45 minutes. The learners had found another space to carry out their learning.</p>
11.05	<p>At 11.00 the teacher moved back into the classroom to get feedback from the learners. The learners started filtering in. Two groups came in first and sat at a table finishing off their notes on their flipchart paper. The rest of the groups came in over the next 5 minutes. During this time, the teacher discussed the work with the different groups.</p>
11.30	<p>The teacher gets the attention of the class and explains that each group is going to feedback on their findings. For the next 20 minutes each group describes what they had found and how they see the scenario playing out. For each group a spokesperson stands up to present the work and an assistant holds up the flipchart paper. The learners remain standing at their circular tables.</p>
11.40	<p>The feedback activity actually takes 25minutes. The teacher then spends 10minutes summarizing the findings and offers new knowledge, linking to visual images and text on the PowerPoint.</p>
11.50	<p>The teacher links the work to the assignment that is the summative assessment for this unit. She hands out a worksheet with reflective questions that relate to the scenarios that the learners have watched or researched during this session. The learners had individual worksheets, but worked in small groups and pairs to work through the sections of the handout. All of the learners were focused on the task, there was very little off-task</p>

12.00	<p>chat.</p> <p>After calling the learners to attention the teacher discusses how the work links to the summative assessment and to other modules. All of the learners are attentive at this point. She also sold the next session and future plans. This included some work experience discussion.</p>
12.05	<p>The teacher then explains to the learners that they need to write up the learning from this session for their assignment. She explained that the learners can find their own space for writing for the last 30 minutes of the class. 5 learners remained seated and were discussing the work, while the rest of the class got up and left the room. The learners who remained in the room were using pen and paper to make notes for their assignments. 2 of the learners were using their mobile phones to access the Internet for further information. The idea seemed to be that they were collaborating on ideas and they were all going to write their assignment at home. The teacher spent 5 minutes with them discussing their work, before leaving the room and walking around the open learning space.</p>
12.20	<p>In the open the learning space there was a group of 5 working outside the room on a round table discussing the work and using laptops to write their assignments. The teacher walked over to them and spent 5 minutes discussing the work with them. After this the teacher walked over to the computer area at the far end of the open learning space. At the desktop computers there were 4 other learners working individually on their assignments. The teacher checked with each of them if they were ok and spent three minutes answering questions from one individual, the other 3 stated that they were fine. I could not see the other learners. Asking the teacher, she stated that she assumed that they had gone home to work and as long as they complete the work then this is fine.</p> <p>The teacher sits at one of the tables in the open learning space and spends some time completing administration duties, before retreating to the staffroom at 12.30. The learners continued with their work and none of them needed to discuss it with her.</p>

Appendix 10 – Observation in the New Building solely in the open learning space

TC11 Observation

Context: 16-18 year olds with background of dis-effectiveness. 4 from the PRU and 2 who had been taken out of school. Small group. Taught primarily in the open learning space on the 2nd floor of City Green College.

9.00	<p>TC11 spent some time at the start settling the students and getting them to focus on a handout task that he had left on the tables before they arrived.</p> <p>The table was set in the centre of a large expanse of open learning space. The lighting was fluorescent and background sound was a quiet murmur.</p> <p>As TC11 discussed a few issues with the learners they began to settle down. TC11 had set the tables so all the learners were gathered around in a group. The table was surrounded by dividers that had been moved to create pseudo walls for a classroom.</p>
9.20	<p>The starter activity on a handout settled the learners and the next activity was introduced. TC11 gave a talk for 10 minutes, then gave out a case study on paper to the group for the learners to work on in pairs.</p>
9.30	<p>The learners remained on task for 15 minutes as TC11 discussed further details with the pairs as he walked around the group.</p>
9.45	<p>TC11 brings the group back together to feedback on what they had found. He then added to this knowledge by talking through some of the skills needed for this vocational area.</p>
9.55	<p>At this point the students began to get visibly distracted by the growing noise in the open learning space and began to signal other students who were walking past the group.</p> <p>TC11 handed out part of a formal workbook for the learners to work through individually. He verbalized that they had 10 minutes for this activity. Throughout this task, TC11 struggled to keep the learners on task, as they were constantly bickering and distracting each other. They also shouted out to other passing learners on several occasions.</p>
10.05	<p>TC11 finished the task and encouraged the learners to feedback. One learner was keen and offered an attempt at all</p>

	<p>questions, 2 of the learners did not involve themselves at all. However, all of the learners seemed restless and distracted, though they did remain seated throughout the session.</p> <p>TC11 talked through some of the future tasks in the handbook and linked the learning to possible future employment. There were some personal jokes made by the students that were quickly addressed by TC11. At 10.25 TC11 sent the learners on a break and told them to reconvene at the computers at one end of the open learning space at 10.45.</p> <p>The learners got up and left, and TC11 cleared up the learning area. He collected the workbooks and stored them in a box, as the learners disappeared to the canteen on the ground floor and some went outside for a cigarette. TC11 picked up his box and retreated to the staff workroom (a large open plan working space for 60 teachers) for a coffee.</p>
10.45	<p>2 learners were at the computers in the large open learning space occupied by several desks, with desktop computers. TC11 did not appear in this space until 10.55. The rest of the learners drifted in one at a time until they were all present by 11am. During this time TC11 was attempting to make sure that all of the learner could get online. The learners were then introduced to the task. While TC11 was sorting out the computers, the learners who had already logged on were accessing YouTube and Facebook. This led to off task discussions and lots of laughing amongst the group.</p> <p>TC11 quieted the learners down then explained the research task that the learners had to carry out for 20 minutes. 2 of the learners did not listen to the task instructions at all. Once most of the learners were on task, TC11 had to repeat the instructions for the two that did not listen.</p>
11.10	<p>Throughout the research task TC11 moved amongst the computers supporting the learners. However, he had to constantly remind all of the students to stay on task as they were exposed to the following list of distractions:</p> <ol style="list-style-type: none"> 4. YouTube/Facebook 5. Discussing non task related subjects with each other 6. Other students on the computers around them signalling and shouting out. 7. Checking mobile phones 8. Music from the mobile phones of the other learners 9. Going to the toilet, which was located right next to the open learning spaces with the computers.
11.20 – 11.30	<p>TC11 encouraged the learners to complete the research and write notes in their workbook. He then attempted to get the</p>

	<p>learners to log off the computers and make their way back to the table they had previously occupied in the pseudo classroom this morning.</p> <p>At around 11.30 TC11 settled the learners down from the transition and around the original table in the open learning space. The learners remained unsettled and discussed non-task related topics with each other for a further 4 minutes until TC11 could settle them down. TC11 had to formally scold one learner before the whole group settled.</p> <p>TC11 then introduced what he termed the final activity. This task was scenario based and linked directly to the task in the workbook and made use of the computer based research notes. The activity was supposed to be an individual task, but the learners talked to each other about the task and worked together.</p> <p>The learners remained on task for 10 minutes before they became distracted by other things in the environment.</p> <p>TC11 seemed to battle on against the distractions for another 10 minutes before threatening the learners that they will be kept here until they completed the task. 2 learners completed the task and wanted to leave. TC11 checked their work and they got up ready to leave. This caused disruption to the group as a whole and TC11 struggled to keep the group focused and so he could attempt a plenary. In the end, he allowed the 2 learners to walk away and meet up with their friends that were at the other end of the open learning space. TC11 quickly discussed the plenary and let the learners know what to expect in the next session.</p> <p>By 12.05 all but one of the learners had left. The remaining learner stayed to ask TC11 questions while TC11 packed up.</p> <p>TC11 had finished tidying and left the mobile partitions in place, as he needed this space again in the afternoon. However, he did let me know that he would need to spend a few moments before this afternoon's class tidying away rubbish left by learners who had used this space for their lunch.</p>
11.30	
11.45	
12.05	
12.10	

Appendix 11 – Thematic Analysis Coding

Themes:

Building design
Curriculum planning
Staff use of space
Behaviour and disruption
Ownership of space
Teacher Training
Trust staff
Threats/issues
Timetabling
Technology
Students

Building Design

- 1 The old building was looking dated
- 2 Old building crumbling and the wifi was not good
- 3 Old building was leaking
- 4 Old building facilities were not nice
- 5 Shared spaces not big enough in the old building
- 6 No social space in the old building

- 7 Development of the building was educational driven and to provide better facilities for learning
- 8 Client chooses space design
- 9 Flexible spaces are needed to allow the building to last 50 years, four walls and a door is inflexible
- 10 When an inflexible space is not used it is wasted space
- 11 Designed around American universities
- 12 Certain vocational areas on ground to allow for customer access
- 13 Building feels nice and I enjoy showing visitors around
- 14 The environment hygiene is much better in the new building

- 15 Building safety a priority
- 16 Agenda to change space led by capacity/economics rather than pedagogy
- 17 Building design not led by economics
- 18 Flexibility requires lots of design and investment
- 19 New building. Improved behaviour
- 20 Classrooms in the new building are nicer
- 21 I have not seen any learning spaces in any other college better than City Green College
- 22 Now we have open learning spaces, it would be a shame to loose them

- 23 What the architects delivered was not what was visioned

- 24 Rooms are too small in the new building
- 25 Rooms too small and cannot alter the layout
- 26 Architects were convinced there were enough classroom. In fact there is teaching in the OLS even though there are empty classrooms
- 27 Classrooms were bigger in the old building
- 28 Not enough power sockets in the classroom
- 29 Staff not confident to question architects
- 30 The spaces are not defined
- 31 Identities of space are not clear (open and online spaces)
- 32 More classrooms needed
- 33 Perceived lack of space by the staff
- 34 Open learning spaces seem like an add-on and not integrated into a policy

Curriculum Planning

- 35 City Green college context is unique
- 36 City green context is based around work and careers

- 37 New spaces require a change of pedagogy
- 38 Need to look at creative ways of teaching
- 39 More independent working
- 40 Open learning spaces offer teachers choice; classroom, open learning space or online
- 41 E-learning can make learning more transparent – learners can see the work for each session
- 42 Middle managers should be more directional, thinking how different delivery methods could be used
- 43 Students and staff liked the rule of thirds

- 44 We realised we still needed classrooms as there is still a lot of instructional lead teaching going on

- 45 When planning, you have an idea of the learning environment
- 46 Unable to know student numbers in advance
- 47 Group work causes disruption in a classroom and wastes time
- 48 Open learning spaces good for up to seven learners otherwise too many distractions
- 49 Large groups of 30+ does not work in the open learning spaces
- 50 I believe management would be happy for teaching to take place in the classrooms. Less distraction and better behaviour

Staff use of space

- 51 Trust staff to use space effectively
- 52 There is no strategy on how learning spaces can be used
- 53 One department is doing well using all of the spaces (a rule of thirds)
- 54 Lesson observations show teaching was still didactic, new environment designed to get out of that
- 55 Teachers still use open learning spaces as a classroom
- 56 Where it has worked, the teachers have created a space that is classroomy – but distractions around the outskirts
- 57 Surprised how different spaces are being used. No-one is complaining
- 58 There are a lot of tutors not using open learning spaces at all and taking them out of the classroom would cause an issues
- 59 I am not sure, with my visual impairment, how I could find my group in the open learning spaces

- 60 Staff confidence low in using a blend of spaces
- 61 If always teaching in a classroom, hard habit to break
- 62 Staff Revert to what they know
- 63 Ineffective use of space has been seen
- 64 Teaching in the open learning spaces
- 65 Teaching cannot be done in open learning spaces
- 66 I have seen teachers trying to teach in the open learning spaces and straining their voices
- 67 Open learning spaces are chaotic and teachers want to build classrooms
- 68 Bad practice observed in open learning spaces
- 69 Forced to teach in open learning spaces
- 70 Teachers want to use classrooms
- 71 Staff think they need a classroom to be a teacher
- 72 A teacher feels the need to be in control
- 73 Open learning spaces not used, as content is intensive and learners need to focus
- 74 Feel institutionalised and courses have always run this way
- 75 More control in a classroom
- 76 Open learning spaces are not easy to teach in
- 77 I tend to use spaces I have control over
- 78 I like a classroom as I can monitor and control
- 79 The teacher in me feels I need a classroom, because of a distraction and the need to get through the content
- 80 I use an open learning space when learners have something to get on with
- 81 At times I feel uneasy teaching in a classroom when I could be in a open learning space
- 82 When a classroom becomes available teachers drift away from open learning spaces
- 83 Too big of a jump for staff to a blended learning environment
- 84 Entry level learners are vulnerable and we have created a little area [classroom] for them creating territory
- 85 The type of teaching I do is not suitable for open learning spaces as the students need to concentrate. I prefer this.
- 86 Used the open learning spaces for a workshop

- 87 Practical elements very important
- 88 At local level, teachers are negotiating their own use of space
- 89 Staff find solutions to avoid using the open learning spaces
- 90 I have to find roaming solutions myself
- 91 Other spaces used, such as the football pitch
- 92 Would like a classroom
- 93 Teachers have to carry resources with them
- 94 If teacher owns space it creates a sense of others cant use it. Therefore generic spaces created
- 95 No ownership of the generic rooms
- 96 Teachers need time to set up when they don't own the space

- 97 Online teaching happens, not sure there is any learning happening
- 98 Observations in open learning spaces shows teaching is not good
- 99 No clear metrics for measuring effectiveness of teaching in open learning spaces or if learners like them

Behaviour and Disruption

- 100 Old building had a reputation for bad behaviour
- 101 New building has no nooks and crannies for bad behaviour
- 102 Managing space should be a shared responsibility
- 103 My learners behave better in the open learning spaces
- 104 When students know the space is for learning it has a massive impact on behaviour

- 105 Learners not aware where social area starts and learning space begins
- 106 Students use any space for socialising
- 107 Have to move other learners out of the open learning spaces
- 108 Majority of the time the teacher is policing other students in the open learning space
- 109 The open learning space is full of distractions
- 110 Open learning spaces are too open. No screens and noise, wandering students cause distractions
- 111 There is noise in the open learning spaces and we need to let students find their own space
- 112 Open learning spaces used for socialising
- 113 Talking and disruption an issue
- 114 Too many interruptions in Open Learning Spaces
- 115 Behaviour and noise in the open learning space is an issue
- 116 I was lucky learners on the other tables were not messing about
- 117 Rooms on other floors used, but there is distractions of other learners coming in

Teacher training

- 118 We could have waited year for teachers to be ready. Being in the space will encourage teachers to find a way
- 119 Thought we had done enough training
- 120 Planned training six months before move
- 121 Need buy-in from teachers
- 122 Behaviour agenda is driving the use of spaces, not the pedagogy
- 123 Staff have autonomy on the use of space
- 124 Classroom door closes and I trust my staff
- 125 Trust staff to get on with it
- 126 Staff are resilient and will make the best of a situation
- 127 Did not know what the space looked like before moving
- 128 No strategy. Left to learning coaches to work out what to do with the space and offer CPD
- 129 Hoped the open learning space would be a catalyst for pedagogical change
- 130 Staff have a dabble at altering pedagogy on training days, but have no time to develop
- 131 No clear guidance on using open learning spaces
- 132 Teachers had never seen open learning spaces before
- 133 Change [in teacher skill] is occurring at a limited pace – technology is moving quicker
- 134 There should have been whole training days around the open learning spaces, using champions
- 135 No investment in training
- 136 Teachers trained in one-way and do not have the skills to teach in other ways
- 137 Time is needed for reflection, otherwise staff go back to the norm
- 138 Lack of training
- 139 Lack of VLE skills
- 140 Lack of time for training
- 141 No time to explore opportunities in teaching
- 142 Change of mindset needed
- 143 Lack of buy in from the staff
- 144 Having time to reflect would allow for more creative use of open learning spaces
- 145 Not sure why teachers did buy into it
- 146 VLE training offered, but confidence in is the key

Timetabling

- 147 Used to have longer to teach, the academic year has been reduced therefore there is competition for space
- 148 Building designed for 9am – 9pm operation, but not being used in this way
- 149 We can set up a classroom anywhere

- 150 Re-engineered the timetable to fit students into less classrooms
- 151 I try not to book classes in the open learning spaces
- 152 I encourage staff to use open learning spaces for group work
- 153 Classrooms need to be kept for teaching and open learning spaces for other learning opportunities
- 154 Did not plan to make open learning spaces bookable
- 155 Staff panicked over lack of classrooms
- 156 Timetabling by managers ensures use of open learning spaces is shared
- 157 People timetable to suit their own personal needs
- 158 Timetable an issue for not standard groups (day release)
- 159 Exams timetabled as a priority
- 160 Classroom booking prioritised for exams
- 161 Maths and English took priority for curriculum timetabling
- 162 Continuous room clashes or double booked spaces
- 163 Classrooms are doubled booked
- 164 Contact time not related to workload
- 165 Contact time not important, the type of room is
- 166 There is competition for rooms, but my large group gets preferential treatment
- 167 Timetabling an issue, restricted to specific rooms
- 168 If there is a clash, it is up to the teachers to sort it
- 169 Teachers sort out booking issues by themselves
- 170 I am a fortunate I am not timetabled to teach in open learning space
- 171 Students have come to do a professional qualification and I have made sure they have a classroom
- 172 Issues of timetabling, no classrooms and end up in the open learning space
- 173 Classrooms are a priority as open learning spaces are not good
- 174 Any bottle neck is met with cries for more classrooms
- 175 There are no classrooms for my learners
- 176 Cannot teach a large group in the open learning spaces

Technology

- 177 Conscious that teaching and learning is developing over time through the impact of technology
- 178 Technology is part of the work we do, not instead of
- 179 Some work could be delivered online
- 180 It was a bold move by the college to be different, with a a massive focus on technology
- 181 Most courses are on the VLE
- 182 VLE used for learning and assessment
- 183 I don't monitor the VLE and trust staff to sort out the courses on there
- 184 We don't monitor online activity, but we don't monitor classroom teaching either
- 185 Expectation that teachers use the VLE, but it is not monitored
- 186 VLE used but not effectively
- 187 No link between the learning that takes place in the physical world and online world
- 188 We need to look at the contracts again, teachers need credit for supporting learners online
- 189 Learning online needs to be monitored
- 190 Technology needs to reflect an impact on success rates or recruitment
- 191 Technology in open learning spaces is working better than expected
- 192 Technology that does not work is technology that leads to the 'sage on the stage' (IWB)
- 193 Students bring in their own laptops for access to the VLE
- 194 Learners choose to do online work at home, as technology is better
- 195 Students use mobiles for learner and not the VLE
- 196 Laptops struggle to connect to the WiFi and take an age to logon
- 197 Not allowed to use computer rooms
- 198 Social media is used for communication
- 199 I use VLE to communicate, students use their own media
- 200 Middle managers should be left to self-manage VLE
- 201 I do not think the middle managers understand the possibilities of digital learning
- 202 Teachers do not have time to support online learning
- 203 Staff anxiety is constantly challenged by the IT

Students

- 204 Power in the classroom has changed, no longer teacher at the front. Learners are more in charge thanks to disruptive technology
- 205 Learners becoming more independent and we wanted the new building to support this
- 206 Students do not expect to be in an classroom as long as the learning is structured
- 207 Learners enjoyed the informality of the open learning spaces Learners do not have the skills to work in open learning spaces
- 208 Students are used to working in a classroom
- 209 Students feel like second class citizens in an open learning space
- 210 Students are socialising in the open learning spaces and not learning at all
- 211 No clear boundaries between different learning spaces
- 212 Senior management need to communicate and take responsibility of discussing space with learners.

- 213 Challenges of new building will continue until students take over the spaces
- 214 Transition training, school to college, for student is needed.
- 215 Students do not know what to do in the space
- 216 Learners do not know any other way of learning
- 217 Sometimes FE students come upstairs to find quieter space
- 218 Scalability is an issue, learners prefer smaller groups

Threats/ issues

- 219 OfSTED a threat
- 220 Competition is not with other HEIs it is to try and encourage the locals to come to Uni

- 221 Resource issues raised with SMT
- 222 Not enough cleaners
- 223 Kitchen smells and distractions in the open learning spaces
- 224 No displays allowed on the classroom walls
- 225 Where displays are present, students got up and walked about using them as prompts

- 226 Employers are key stakeholders, demand learners just pass the course

- 227 There is a disconnect between what is driving the business upstairs and the teaching downstairs
- 228 It is shameful that £50 million has been invested and the management have gone back to their old ways
- 229 Could take 3 years to turn the college around to offer a positive student experience

Appendix 12 – Notes on linking themes to the research questions

- ***In which spaces does teaching and learning occur in City Green College?***
 - o *Timetabling*
 - *Economics – college academic year has been reduced and even though the college was designed to be open 9am-9pm, this is not cost-effective (not enough courses are timetabled beyond 5pm)*
 - *Identity – Staff panicked over lack of classrooms. They wanted classrooms kept for teaching and open learning spaces for other types of learning.*
 - *Timetabling was meant to share the spaces available. However, people are timetabling to suit their own personal needs. Exams, English and maths sessions take priority over every other session. This creates continuous room clashes and double booked spaces.*
 - *If there are any clashes it is up to the teachers to find a solution. However, some teachers ensure that large groups get preferential treatment and some believe that students come to study a professional qualification and deserve a classroom.*
 - *Some teachers believe they are forced to teach in the open learning space, even though they believe the quality of teaching is not as good as in a classroom. There are not enough classrooms for learners. One of the Senior Management stated that they believed that the Middle Management would be happy for their teachers to be in classrooms, as there are less distractions and improve behaviour.*
 - o *Curriculum Planning*
 - *Both Senior Managers and Middle Managers believe that City Green College has a unique context in that it caters for the local population and is focused on courses leading to employment and careers.*
 - *Even though members of the Senior Managers stated that there was still a need for classrooms due to some teaching still being teacher-led, the Middle Managers were keen to suggest that there were opportunities to be creative with the curriculum. The new spaces require a change of pedagogy and more independent ways of working.*
 - *The teachers and Middle Management understand that trying to organise group work in the classroom causes disruption, organising the space. Therefore, the open learning spaces would be much more effective for this. However, large groups are difficult to manage in such spaces and it is difficult to plan, as*

teachers are not aware of how big groups are going to be until a few weeks after enrolment and the teaching sessions starting.

- *Students*
 - *The Senior Management stated that the learning environment had changed, the power of the classroom was now with the students rather than the teacher. The students are able to access a range of information, without relying on the teacher.*
 - *Even though one teacher believed that students do not expect to be in a classroom, as long as the learning is structured, all of the other teachers stated that students expect to be taught in a classroom. One teacher even stated that his students felt like second class citizens in the open learning spaces.*
 - *The main issues for students is that they are not aware of what the spaces are to be used for. They have not received any guidance and transition training is needed for those moving from school to the college. Otherwise, they see classrooms for learning and open learning spaces for socialising.*

– Is there an expected transformation of teaching through the use of the new learning spaces?

- *Building Design*
 - *City Green College's old building was not fit for purpose. There were not enough spaces for learners to congregate between lessons and there were no social spaces. The building was looking old and required constant maintenance.*
 - *The Senior Management saw the move to a new building as an opportunity to provide better facilities for learning and to allow staff to use new pedagogy. The new building of City Green College was designed to contain a large amount of flexible space that would have many uses, to avoid the wasted space of empty inflexible classrooms in the old building.*
 - *The Architect explicitly stated that the building design was client (Senior Management) led and that the design was based around flexibility of the use of space, environmental considerations and safety (both structural and student safety).*
 - *However, the Senior Management stated that the, what the architects delivered was not what was visioned, and the Middle Management are convinced that, with the reduction of classrooms and overall estate size, the development was economically, not pedagogically, driven. The Architects admitted that the staff were not confident enough to question their decisions.*

- *Even though the Middle Management agreed that the building was clean and impressive to show visitors, they agreed with the teachers who stated that the classrooms were too small, difficult to alter the layout and there are not enough of them. The Architects on the other hand were convinced that there were enough classrooms and in review, they had seen teaching in the open learning spaces when there were still classrooms free!*
 - *The open and online learning spaces, promoted by the Senior Management to create more spaces for group work and independent learning, were not clearly defined. Teachers and students found themselves unsure as to what space was for socialising and which spaces could be used for learning. One Teacher stated that the open learning spaces seemed like an 'add-on' and not integrated into the curriculum strategy.*
- *Teacher training*
 - *The Senior Management thought they had put enough training in place and they were clear that they could not wait for teachers to 'be ready' to work in the new learning spaces, instead they were convinced that being in the spaces would encourage teacher to find the best way to use the spaces. They hoped that the mixture of new learning spaces would be a catalyst for changing pedagogy.*
 - *However, the teachers did not know what the spaces would like before they moved in and felt ill prepared. Both the Middle Management and teachers stated that there was no strategy communicated by the Senior Management on how they should make use of the different learning spaces.*
 - *The Senior Management did not know why the staff did not 'buy-in' to the concept of the new learning spaces and assumed it was because the teachers did not believe the move to the new building was going to happen. However, the Middle Management and Teachers were clearer on this. They stated that the lack of investment in amount of CPD they received and time to reflect on the pedagogical changes required to use the mixture of learning spaces led to teachers demanding classrooms.*
 - *Only one Middle Manager had the foresight of the changes that were going to happen in the new building and started CPD for his team six months before the move. All staff reviewed their curriculum provision and mapped it against his proposed model of learning in the new learning spaces. The success of*

this was commented on by the Senior Management and in an OfSTED report.

- **What issues do teachers face when negotiating with the new learning spaces (gaining access and using the different types of learning space)?**
 - o *Staff use of space*
 - *There is no college strategy on how the different learning spaces should be used. The Middle managers, therefore, trust staff to use the different learning spaces to support their learners.*
 - *Lesson observations showed that teaching was still didactic, even though the learning spaces were designed to avoid that. Teachers are still teaching in the open learning spaces and creating pseudo classrooms. The teachers stated that creating a space like a classroom in the open areas works, other than general distraction around the outskirts of the area.*
 - *One Senior Manager admitted that there are a lot of teachers not using open learning spaces at all, remaining in the classroom. And she believed those tutors are best left in the classroom as she thought they would not be able to cope in the alternative spaces.*
 - *The Middle Management stressed that staff confidence in using a blend of learning spaces is low. Ineffective teaching has been seen in the open learning spaces and staff would prefer to revert back to what they know, teaching in the classroom. They believed it was too big of a jump to move from classroom based teaching to using a blend of different spaces.*
 - *Teachers want to teach in a classroom as they feel that they are in more control in that environment and could monitor the learners easier. Some felt that they had been forced to teach in open learning spaces when they would rather not. If the teachers wanted to alter the timetable and find a classroom rather than the open learning spaces they were left to find solutions for the themselves, Middle Managers stayed out of this negotiation. Though one teacher, who did not teach any of his sessions in the open learning spaces, stated that he felt guilty sometimes when he thought the activities the learners were participating in could be taught in the open learning space rather than the classroom.*
 - o *Behaviour and disruption*
 - *The Architects stated that the open plan of the college building removed any hidden spaces and would*

- improve behaviour. They had seen evidence in other buildings that when students know that a space is for learning that there is a positive impact on behaviour. This was supported by one teacher who agreed that his learners behaved better in the open learning space, as they felt that they were being watched.*
- *However, this was not seen by the Teachers, who stated that students use any space for socialising and not learning and the majority of the teaching time in the open learning spaces is spent moving learners out of the space they were teaching in and addressing disruption. There is lots of noise in the open learning spaces and they are full of distractions.*
 - *Even though the Middle Managers agree that the policing the open learning spaces should be a shared responsibility of all staff, it often fell to the staff teaching in the area to control disruptions.*
- *Technology*
 - *The Senior Management were conscious that teaching and learning was developing overtime through the impact of technology. The Middle Managers agreed by suggesting that technology is part of what we do, not instead. The Senior Managers agreed that it was a bold move to focus on technology during the building design to make the college different from other learning providers. And it can be seen that all courses are on the VLE, and this is being used for learning and assessment.*
 - *The Senior Managers were keen to stress that they were not interested in monitoring online learning and trusted staff to use the best delivery and assessment method. Though, some of the Middle Managers were interested in increasing the measurement of online learning.*
 - *Students can bring their own mobile devices to college. However, due to connection and speed issues the learners often prefer to work on online learning at home. One teacher stated that he did not bother with the VLE, due to connection issues, and instead got the students to use their own smartphones to access the Internet.*
 - *Overall, the Teachers are making use of technology in teaching and learning – in particular to support work in the open learning spaces. However, teachers stated that their anxiety is being constantly challenged by the reliability of IT within the college.*
 - *Threats/Issues*
 - *The only person to mention OFSTED directly was one of the Middle Managers. However, it would seem that there is a lot of pressure on the performance of*

teachers in the learning spaces and it is likely that this stems from teaching metrics within the OFSTED framework.

- *The untidiness of the environment was raised by more than one teacher. A significant factor when considering Clarke et al's study that suggested cleanliness was an important factor – also supported by Hattie in his study of factors that influence learning. The teachers suggested the issue was economic, as a lot of cleaners had been laid off prior to moving into the new building.*
- *Two Middle Managers were explicit in their concerns of a disconnect between the perceptions of reality of the Senior Managers and the actual reality seen by the teachers. One Senior Manager admitted that it was a shame that the college had invested £50 million in a new building and then reverted back to the old ways of delivering learning.*

Appendix 13 – Theme Definitions

Building Design

Building design considered all data that related to issues with the old building at City Green College and design decisions and outcomes in the new learning spaces.

Curriculum Planning

Curriculum Planning included discussions on the context of City Green College and the programme development decisions made when planning for learning

Staff Use of Space

How staff make use of the different learning spaces within City Green College and their confidence in using those spaces.

Behaviour and Disruption

Effects of student behaviour and disruption on the use or choice of learning spaces by teachers.

Teacher training

The amount of teacher training delivered, teacher participation and the quality of that training, linked to the use of learning spaces in City Green College

Treats and Issues

Additional threats and issues raised by participants about the use of the new learning spaces in City Green College. This theme is based on what Vulliamy and Webb (1992) termed the 'rag-tag' category.

Timetabling

Issues around booking rooms and planning curriculum when space is considered a resource.

Technology

Data collected on the effects of technology in the use of space or planning for teaching and learning in specific spaces.

Students

Teachers' perception of the students' position within space, their feelings towards different learning spaces and their competencies in using the different spaces in City Green College

Appendix 14 - College Observation Form

Trainee teacher observed:			
Observer:		Observed course/ level:	
Date & time:	Number of learners:	Organisation:	
<u>Teacher to complete:</u>			

Summary of strengths:

Summary of areas to develop:

Requires Improvement:

A = Established B = Consolidating C = Area to develop D = Not seen	A	B	C	D
Professional values and practice				
Have you reflected on what works best in your teaching and learning to meet the diverse needs of learners? (Teaching practice file reflections and Action Plan) PS 1				
Have you built positive and collaborative relationships with colleagues and learners? PS6				
Have you evaluated your practice with others and assessed its impact on learning? PS10				
Did you demonstrate you understand the teaching and professional role and your responsibilities? (Including H& S) PS 12				
Learning and teaching				
Did you inspire, motivate and raise the aspirations of learners through your enthusiasm and knowledge? PS 3				
Was there evidence that you have applied theoretical understanding of effective practice in teaching, learning and assessment - drawing on research and other evidence? PS9				
Did you encourage learners to reflect on their learning and its wider applications?				
Were you creative and innovative in selecting and adapting strategies to help learners to learn? PS4				
Did you use differentiated learning strategies to engage and challenge all learners?				
Did you value and promote social and cultural diversity, equality of opportunity and inclusion? PS5				
Did you enable learners to share responsibility for their own learning and assessment, setting goals that stretch and challenge? PS 17				
Did you communicate effectively and present information clearly?				
Did you manage and promote positive behaviour? PS 11				

Did you motivate and inspire learners to promote achievement and develop their skills to enable progression? PS13				
Specialist learning and teaching				
Did you apply in-depth subject specialist knowledge and pedagogy to meet the needs of all learners? PS8				
Is there evidence that you have maintained and updated knowledge of your subject and/or vocational area? PS7				
Did you make links between the specialist area and its wider context (e.g. work, legislation, current issues)? PS13				
Did you use specialist resources to create interest and discussion?				
Planning for learning				
Did you structure your plan to include start with links to previous learning & rationale, conclusion with re-cap?				
Were you creative and innovative in planning strategies to help learners to learn? PS4				
Did you plan to deliver effective learning programmes for diverse groups or individuals in a safe and inclusive environment? PS14				
Did you value and promote social and cultural diversity, equality of opportunity and inclusion? PS5				
Does your plan differentiate to meet the needs of all learners?				
Have you planned how to motivate and inspire learners to promote achievement and develop their skills to enable progression? PS 13				
Have you planned to enable learners to share responsibility for their own learning and assessment, setting learning outcomes that stretch and challenge? PS17				
Assessment for learning				
Did you apply appropriate and fair methods of assessment? PS18				
Did you provide constructive and timely feedback to support progression and achievement? PS18				
Did you take the opportunity to use peer or self-assessment, where appropriate?				
Did you employ effective questioning skills?				
English, mathematics and technology				
Did you effectively address the mathematics and English needs of learners and work creatively to overcome individual barriers to learning? PS16				
Did you promote the benefits of technology and support learners in its use? PS15				
Did you encourage your learners to recognise the significance of their learning for their own progression? PS13				

A successful session

YES

NO

The Post-Observation Process and Tasks

You are expected to:

Read through the observation report, paying particular attention to feedback regarding both consolidating skills and areas to develop and discuss with the observer any points that you need clarifying.

Complete a written reflection on the observation using any format but drawing on models of reflection; the focus should be on your development as a teacher.

Develop an Action Plan detailing how you intend to develop your practice

Use the observation feedback, reflection and action plan to inform the rationale for the next observation.